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ORIGINAL ARTICLES.

THE THERAPEUTICS OF ACUTE BRONCHITIS.

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PART II.

IN MEASLES.

IN measles, bronchitis and pneumonia are more fatal than any other complication we meet with. Before the eruption appears a harsh, laryngeal cough is commonly present. With the development of the exanthem this very generally ceases. But we must remember that by it the susceptibility of the mucous surface to catarrhal influences has been augmented, and hence one good reason for especial care in avoiding them.

During the subsidence of the eruption some act of carelessness in nursing may give rise to a renewed rise of temperature and some increase in the rapidity of respiration, with a more or less frequent cough. Examination of the chest will probably show that the physical signs of bronchitis are generally pervading both lungs. The inflammation advances with striking rapidity when once it has taken possession of the mucous membrane of the tubes. The secretion of mucus goes on apace, blocking up the smaller bronchi, the lips and cheeks become livid, the prostration great, and we are called upon to deal with a capillary bronchitis at the close of a specific fever, during which the patient's reserve of strength has been more or less exhausted. In doing so we have in *tartar emetic* a medicine so completely adapted to the totality of the symptoms, and the use of which has so often proved successful in these cases that I doubt if any advantage is gained by resorting to any other until the secretion of mucus is checked and the expulsive power of the tubes in a measure restored. Then *hepar sulphuris* will probably be useful.

IN SCARLATINA.

Bronchitis is less frequently observed than in measles—possibly from the fact that the mucous membrane of the respiratory passages does not receive that preliminary irritation which it ordinarily does in measles.

When it occurs it does so usually at the height of the eruption. It is both more easily checked and less likely to run into the capillary form than it is in measles. Still we must remember that we have to deal with an inflammation in a toxemic subject, and must pay due regard to this in selecting our medicines. *Phosphorus*, given as soon as the mischief is detected, will, very generally, check its progress quickly, but should the secretion of mucus increase rapidly the moist râles become abundant and fine in quality, *tartar emetic* should be substituted for the *phosphorus*.

It is quite usual, in the event of capillary bronchitis being established for other complications to be arrived at also, notably some embarrassment of the heart's action and nephritis. In this event *arsenic* will probably be indicated. This medicine, while corresponding in its pathogenesy more closely to the cardiac and renal symptoms, is less indicated in the bronchitis than is *tartar emetic*. Hence I have no hesitation in alternating it with the latter in these, happily, very rare instances.

IN SMALL-POX.

Bronchitis is said to be a very common complication. In my own experience I do not remember bronchitis to have been present in any cases, save in those where I had reason to believe that pustular development had taken place in the throat and larynx. In such cases we have in *tartar emetic* a medicine the pathogenetic action of which is not only similar to the bronchial complication, but also to the general phenomena of the eruptive fever, and the prostration which is invariably associated with it under these circumstances.

IN WHOOPING COUGH.

The frequency of bronchitis as a complication—and, moreover, a very frequently fatal complication—may be traced to the practice which prevails of allowing children suffering from it a much greater latitude in moving about a house and exposing themselves to draughts than is permitted in other acute illnesses.

An accession of fever, marked by a rise in temperature, increase of cough, considerable dyspnœa between the paroxysms, and moist râles heard more generally and more constantly announce the setting in of bronchitis.

* Abridged from the *Monthly Hom. Review*, Nov. 1, 1887.

The febrile excitement is of the type most generally checked by *aconite*. With the bronchial irritation is a great deal of dyspnœa, together with the spasm of the original disorder—a group of symptoms resembling such as are excited by *ipecacuanha*—and with these two medicines a bronchitis during whooping cough may, if taken early, be generally kept under control. We must, however, be prepared to meet with the capillary form here and to resort to *tartar emetic* when this is pronounced.

IN CROUP.

An attack of croupous or of catarrhal laryngitis in the infant is not infrequently followed, as the laryngeal inflammation subsides, by its extension to the bronchial tube. *Iodine, hepar sulphuris* and *tartar emetic*, should the terminal bronchi become overloaded, are the medicines most similar in their pathogeneses to the condition then existing.

IN GOUT.

Passing from the acute disorders, in which bronchitis occasionally appears as an interloper, I go on to consider those chronic disorders in which it is commonly met with, and that, rather as a direct result of the essential nature of such diseases than simply as a consequence of some catarrhal influence being brought to bear upon the subject of them.

Bronchitis, in a gouty subject, will sometimes suddenly disappear on the development of gout in one of its favorite localities—the smaller joints. The reverse also will happen. A gouty toe is suddenly relieved of its burden of pain and swelling, and, as suddenly, a harsh, loud cough arises and sibilant râles are heard over the larger bronchi, and more or less throughout the chest. At the same time there is considerable febrile excitement, giving rise to a higher temperature than is met with in acute bronchitis in a person in ordinary health. Such symptoms as these, especially when considered in relation to the passive visceral congestion leading to the state of lithemia which prevails in the gouty, point to *aconite, bryonia* and *belladonna* as the medicines most likely to give relief to the bronchitis. The first will be required in proportion to the degree of fever present; the second is indicated where the irritation is localized in the larger bronchi, and the third where the area of congestion is both deeper and wider.

When the urgency of the acute symptoms has been removed there is no medicine better adapted to relieve the cough, expectoration and proclivity to visceral congestion than is *sulphur*. Its value has been recognized in quarters where empiricism is regarded as the sole guide in prescribing. Dr. Graves, for example, says: "I have no doubt that five or ten grains of *sulphur* taken three or four times a day is one of the best remedies that can be prescribed in cases of chronic cough, accompanied by constitutional debility and copious secretion into the bronchial tubes."

IN HEART DISEASE.

It is where, owing to stenosis of the mitral valve, in cases where, in addition to the impediment to the circulation at the left auriculo-ventricular opening, we have the free entrance of air impaired by the narrowing of the congested bronchial tubes, that bronchitis involves so much danger to life. Scarcely less serious is any impairment in the capacity of the aortic valves.

The symptoms are similar to those presented by a bronchitis occurring in a person of ordinary health, save that the dyspnœa is much greater and the exhaustion more pronounced. The expectoration is rarely, in the first instance at any rate, considerable, but in the later stages there is great difficulty in expelling any mucous accumulation.

When, in a case of organic cardiac disease, we find a frequent short, hard cough, soreness over the anterior surface of the chest, scanty expectoration, sibilant râles, painful dyspnœa, together with palpitation, a quick, irregular pulse, and a degree of inflammation in excess of the amount of bronchial inflammation, *bryonia*, given in alternation with *arsenic*, is the medicine which, so far as my study and experience have gone, is not only that best indicated by the symptoms, but that which gives the quickest and greatest amount of relief. Should capillary bronchitis threaten, *tartar emetic* alone is the most useful medicine.

There are cases where the cardiac symptoms are especially prominent, where there is a sense of constriction over the heart, which evidently labors in its work. The respiration is very much depressed with a sense of suffocation, aggravated by cough, attended by scanty mucous expectoration, the pulse being weak and irregular. In such, *cactus* is of all others the medicine which is most serviceable.

In cases of bronchitis, where the heart is dilated, the pulse feeble and intermittent, breathing seriously oppressed and expectoration scanty, *digitalis*, either alone or in alternation with *bryonia*, or with *ipecacuanha*, if the cough is at all spasmodic, will constitute our most reliable medicines. During convalescence in these cases *arsenic* is most frequently indicated.

IN DISEASE OF THE LIVER AND KIDNEY.

In congested liver it is, where this condition is secondary to disease of the mitral valves, where the blood-stasis arising in the vena cava and hepatic veins has extended to the portal veins, that bronchitis is most common, and then the remedies called for in cardiac disease will be those indicated.

In Bright's disease of the kidney the susceptibility to cold is largely increased, and hence catarrhal bronchitis is frequent in its chronic forms. The mucous secretion is usually free, with considerable soreness of the chest and frequent cough. The medicine which is most generally indicated, both by the bronchial and renal symptoms, in these cases is *mercury*.

IN RICKETS.

I refer to bronchitis here chiefly to introduce an observation of Sir William Jenner's regarding the source of danger where it occurs in a rickety child. This, he points out, arises not so much from the intensity of the inflammation as because the softening of the ribs renders the mechanical power, by which inspiration is performed, so defective that the impediment offered to the entrance of air by the mucus in the bronchial tubes cannot be overcome, and collapse of large portions of lung follows.

I believe that in such a case our most hopeful medicine would be *phosphorus*, given in the third decimal dilution pretty frequently.

CAPILLARY BRONCHITIS.

In children of a few months old capillary or suffocative bronchitis is occasionally, though rarely, idiopathic; more frequently it arises either from an extension of the inflammation from the larger to the smaller tube directly, or still more frequently, from the downward passage of the catarrhal products which have accumulated in the former.

In the aged and worn out it is almost always the result of an extension of the inflammation of a catarrh of the larger tubes.

At the onset of a capillary bronchitis *aconite* is our mainstay. Given early and given frequently, at least every hour, we may reasonably hope that the stage of congestion will be promptly checked, and, if that of secretion is not altogether prevented, it will at any rate be kept within such limits as shall prevent inhalation of the catarrhal products by the air-vesicles. *Aconite* is the only medicine, so far as I know, which can be given with confidence during this stage, and, consequently, the alternation of it with any other is a mistake.

When, however, secretion commences, when the lips appear somewhat livid, when the breathing is very heavily oppressed, when the pulse, though still excessively rapid, is smaller, *aconite* must be laid aside and *tartar emetic* be given at once. Given not as a depressant to reduce excessive pyrexia, not as an emetic to procure the expulsion of accumulated mucus, but as a specific to extinguish the morbid process going on in the mucous membrane of the extreme bronchi. It is the dose in which it has been deemed necessary to give this medicine in the past for the purpose of procuring a subsidence of the fever or its emetic action, that has proved so ineffective, if not so positively deleterious, in the hands of those who do not recognize its specific action. On the other hand, if prescribed in drop doses of the third decimal or third centesimal dilution the good results which follow are speedily apparent in a more healthy appearance of the lips and cheeks, in the less frequent respirations and the more frequent cough, with mucus clinging about the tongue and cheeks, requiring removal.

Lastly, if signs of pneumonia are present, *phosphorus*, in the third centesimal dilution, will be more effective than the *antimony*. During convalescence, while cough and mucus still remain, though the respirations have become nearly normal, *hepar sulphuris* will be required to complete the recovery.

In old people, where the prominent condition is general asthenia, our choice of a remedy lies between *tartar emetic* and *arsenic*. Where lividity, oppression of respiration, an excessive secretion of mucus with a subnormal temperature are present, the former is the more useful medicine. Where the heart is particularly feeble, irregular in its action, and palpitation troublesome, the respiration difficult, but the mucus not very considerable in amount, where, indeed, there is more congestion of the mucous membrane than an active secretion of catarrhal products, then *arsenic* is more closely indicated, and hence gives better results in practice.

PLASTIC BRONCHITIS.

Of plastic bronchitis I have little to say. It is very rare and I have never met with a case. Its actual existence is not ascertainable until a cast of the tubes has been expelled. Is there any drug that both causes and cures such a condition as this? In some experiments on rabbits, detailed by M. Curie in 1860, it was proved that *bryonia* given in increasing doses daily for eight months produced a pseudo-membranous firm tube lining the larynx, the trachea and penetrating the sec-

ond and third ramifications of the bronchi. Hence, M. Curie showed that *bryonia* did produce something exceedingly *like* plastic bronchitis.

In 1880 Dr. Gibbs Blake, of Birmingham, had a patient, a man of sixty, with a dilated right heart, who for several days expectorated complete arborescent casts of bronchial tubes, varying from two to six inches long. *Bryonia*, in the second decimal dilution, was the only remedy. He made a complete recovery, and had no return of the disease.

In conclusion, let me say a few words on the general therapeutics of acute bronchitis.

In the first place, a patient should be confined to a room with a temperature of 65° F., and during the congested stage the atmosphere should be kept moist by steam from the "bronchitis kettle." During the same period, warm moist applications, either in the form of linseed meal poultices or the wet compress, should envelope the chest. There is, I believe, no doubt about such applications materially assisting in reducing congestion. But when expectoration, free expectoration, has begun I am nearly equally sure that they do harm. They diminish the contractile, and consequently expulsive power of the bronchi, and by their weight lessen and impede the expansive powers of the chest.

When, then, expectoration of catarrhal products has been fairly set agoing, my practice is to remove all moist heat and wrap the chest in cotton wool. It is lighter, and consequently no hindrance to free respiration, and, being dry, has no relaxing influence over the muscula tissue of the tubes.

In the dry stage inhalations of steam, unmedicated save with the specific medicine, are often grateful. During that of secretion such inhalations are, like poultices, injurious.

Great advantage may be derived from bronchitis patients wearing flannel next the skin. It is as useful in acute bronchitis as it is in acute rheumatism. Warmth to the body, clearly within the limits of producing its depressing influence, should be promoted by every means at our command.

The diet will be regulated by the power of digestion possessed by the patient. Bland, simple nutriment in sufficient quantities is needed to counteract the waste incurred by fever and the catarrhal secretions. The appetite is generally *nil*, and there is often a loathing of food. Here peptonized foods have been useful when the state of exhaustion present clearly demanded more nutriment than the patient could be persuaded to take, or than could be digested when presented in the ordinary form.

Stimulants—alcoholic stimulants—are rarely called for except in capillary bronchitis. Here a few drops of brandy given to an infant in the extremity of exhaustion has helped the little heart to carry on its work until the specific medicine has so influenced the tubes as to check or promote absorption of the secretions. In the aged, champagne has frequently proved effectual in the same way. Counter-irritants in the form of mustard plasters—to say nothing of blisters—are, I believe, absolutely needless in all cases where specific medication is resorted to.

THE CONFLICT OF THE MOODS.

BY FRANK A. ROCKWITH, M. D.,
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A Scientific Problem.

"The very interesting scientific fact is given elsewhere on the authority of the 'Advancement of Science,' that when people are sick above the diaphragm they are optimistic, but when they are sick below the diaphragm then they are pessimistic. It is very valuable information and a most suggestive discovery. When a man insists on being cheerful hereafter you can account for it and pity him; his disease has got the upper hand of his diaphragm, and there are only two things to be done—either turn him over discreetly so that his diaphragm will show above his ailments, or injure him about the legs until his pessimistic virtues are aroused. It is one of the curious features of the case, going to prove the theory that gouty people are pessimists, while consumptives are always 'happy. Science, for some strange reason, declines to define the temperament of the man who has no ailments above or below the diaphragm. Perhaps it is not acquainted with him.—*Hartford Courant.*"

The news-press in its hungry greed for material searches everywhere, hither and thither, far and near, into the private and the public, regardless of its interests or its sympathies. Nowhere is this rapacity noticed more effectively than in that of the ready-made journalism known as the patent-bowel news. Here ever and anon we come upon selections which are generally shopworn to the utmost in the spheres from whence they emanated, or again grotesque in their application as new material, while at other times they are but loosely conglomerate as subject matter. To all of which no real objections might be offered, were it not that news thus obtained is dished up with commentatorial flips as uncalled for by the subject as they are lacking in pointedness; vide the "Scientific Problem" here introduced as a text for the following remarks:

Whatever the whole of the above clipping may have been in its original presentation, the *Hartford Courant* man has certainly failed to succeed either in proving himself interested in the advancement of science or as a satirist of the possible foibles of learning. Except, perhaps, while deprecating the choice of such words as optimism

and pessimism when applied to the psychical correlation of the different regions of the human body, there is nevertheless nothing so astonishingly new in the assertions as is therein pointed out. Nasse, as long ago as 1818, published in the first number of the *Zeitschrift für Psychische Aerzte* the psychical relations of the heart to mood-conditions—Gemüthszustörde.

He was followed in subsequent numbers by Jakobi, who showed a similar relationship in other organs. Hagen, in his Beihäge zür Anthropologie (1841), also speaks of the psychical significance of the various organs of the body. But why all this? Is not the psychiatric term hypochondriasis sufficient to show the existence of certain moods or mental states due, or at least supposed to be due, to sub-diaphragmatic lesions, and, if not due, at least associated with such? Do we not in every-day parlance designate certain peculiarly disproportioned people as of a dyspeptic nature? Or, pray, why the word and what the meaning of spleen? The dictionary will tell us: "Spleen, one of the viscera supposed the milt, the seat of anger, melancholy and mirth. Anger, spite, ill-humor. A fit of anger, inconstancy; caprice; a sudden motion; a fit. Melancholy, hypochondriacal vapors. Immoderate merriment."

Again, who is there, be he professional or layman, who has not marveled at the peculiar hopefulness, though not exactly cheerfulness, of the victims of pulmonary and cardiac ailments?

That health and disease exert a wide influence upon human nature has been shown most beautifully, and at the same time most acceptably, by Mr. Francis Galton, F. R. S., in his laborious work on "Hereditary Genius." He has demonstrated there that there exists a frequent correlation between an unusually devout disposition and a weak constitution, and that as regards health, "the constitutions of the divine were remarkably bad," and elsewhere he comes to the conclusion "that robustness of constitution is antagonistic in a very marked degree to an extremely pious disposition."* Amusing and highly suggestive indeed are his final analyses of the individual lives of the most noted evangelical clergymen. The Roman clergy being bonded to celibacy, he cannot make use of the biographies of that set of divines in his illustration of the specialty for which he writes, namely, heredity.

But who is there that has read the "Lives of the Saints," or the more voluminous *Acta Sanctorum* of Roman calendar, who does not see mental and somatic neuroses stamped upon every line of those biographies?

Verily, not far out of the way is the alienist who impulsively classes piety and religiousness as mere psychopathic manifestation of bodily decrepitude.

To the physician clinical experience will ever remain a most powerful source of philosophical deductions. Hence the following history of a case will lend me the material with which to illustrate the subject matter of this paper:

I have for some years past been acquainted with a physician, only indifferently known to the profession at large, with whom religion and irreligion oscillate with unfailing regularity between the extremes of his bodily health. He is a man of a high-strung nerve-organization, yet without the least hereditary taint of insanity, nor himself in any way eccentric; nor is he a genius by any means, hence not over-wrought in any particular direction; he is rather commonplace and sensible. He is a scion of a line of noble ancestors (that is, noble in a heraldic sense), who for more than six hundred years have played no small part in the world's history, but who, wherever found, were seen upon the side of progress and civilization. Hence they were among the foremost defenders of Luther and the ideas which prevailed during that momentous epoch of the middle age. I purposely and without apology to supersentitive American republicanism, mention here the strain of blood which flows in the veins of our subject, simply referring the reader to Galton's researches in "Hereditary Genius."

This individual succumbs under the influence of purely congestive (hence depressant) constitutional ailments to the deepest religious moods and most earnest piety, with studies and readings confined to the harshest and most ascetic of theological doctrinarians, while, on the other hand, with a risen healthy thermometer, his mind is again sent up to the highest notch of rationalistic convictions. In health deeply ashamed of his religious moods, he is inconsolably repentent when sickness again prostrates him. Or *summa summarium;* in sickness a Thomas à Kempis, in health a Schoppenhauer. Or, as he himself has put it, "When the devil was sick the devil a monk would be," &c. These periodical fluctuations of his disposition have made of him a scholar of widespread information. Thus in one phase of

* Now if *mens sana in corpore sano* means anything at all, then has Mr. Galton refuted as with a single stroke of the pen Mr. John Stuart Blackie's wholesale assertion that atheism be simply an insanity, "a most strange disease of the speculative faculty," and that, on the contrary, he has put into the mouth of the physician the proper word by which religion must henceforth be classified as a factor in social perturbation. It would be indeed perfectly pat to our argument to also enquire here what the sanitary conditions may have been of the great man when he quoted his *Tres medici duo athei?*

his moods he will pursue the studies of the ancient languages and the literaure of the poets, in another searching and personally laboring in the newest realms of the physical sciences. When we now consider the history of this case and then refer at the same time to the two authors above introduced, we must come upon a practical realization of what statistical and historical Galton has fished up out of the musty and often unsavory records of the world of biography; while, on the other hand, we find the staunch defence of religion to weaken under the devoted and challenging efforts of Blackie. And what now becomes of the latter's assertion that "it is more safe in matters of healthy human sentiment to trust to poets than to philosophers," or "that which has long had the most evil reputation of begetting atheism is physical science." Yes, thus would the gloomy-coated gentry of religion hurl mankind back into the darkness of the ages gone by—they would befog and beblear both brain and vision of the masses with a sensuous and irrational poetry. Rather a Dante for Mr. Blackie than a Huxley; rather the Cabala than modern Physics—and possibly, too, perhaps rather, a praying dervish than a so hatefully educated physician at the bedside of his youngest born—if so it be that he be blessed with issue at all. Who can read the signs of the times and see hypnotism and prayer-cure succeed where witchcraft and spiritualism has left off, and not understand on which side of the fence the insane neuroses are habited or have their being? And as to the Hartford man's astonishment at the very interesting scientific fact that when he is sick above the diaphragm he is optimistically inclined, and when sick below the diaphragm he is pessimistically so, let him not worry his news-besotted mind about what he may be if neither sick above or below the diaphragm, for such a condition cannot possibly happen to him as long as he continues to flourish the scissors for the sole use of patent-bowel information.

We may deplore that, in the startling development of the exact sciences of to-day, the knowledge-eager student should have overleaped himself. So that in the search for plastic evidences, whether in the universal macrocosm or the telluric microcosm, he should have pursued too entirely the form and substance of the cell or the possible arrangement of the molecule, rather than such imponderable forces for which at this day yet no name has been satisfactorily coined, and for which "vital energy" must needs stand godmother to the more classical ideal, "the psyche," of the last century.

Nasses disquisition upon the psychiatrics of the heart; Carl Gustav Carus's physiological system or H. Klenki's attempt to create an organic psychology have been forgotten or become unfashionable. Hence the shallow witticism of an overwise secular press, which arrogates to itself the censorship of all and every order of literature. Reared as are these cyclopædic gentlemen of the newsroom are in an atmosphere of an ever fulminating newness, with a smattering cognizance of names and dates of circumstances, but of the inner substance of nothing, what can be expected of such a generation, still fluctuating like our cliniatric above, between the sentimentalism of religion and the realism of positive discoveries? It is furthermore to be regretted that in the recent almost furious search for disease germs there should have been overlooked the correlativity of organs and their functions. To the semeiologist this loss has been inestimable, for by a proper appreciation of the correlation of organic functions we would now have an easier differentiation between the central and peripheral or between reflex and functional symptoms.

COMPLEMENTAL RELATIONSHIP, THE ONLY RELATIONSHIP OF HIGHLY ATTENUATED DRUGS.

BY ELDRIDGE C. PRICE, M. D.
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BEFORE offering the following suggestions it is necessary that I explain what I mean by highly attenuated drugs.

Any preparation of a drug in which the crude drug is diluted to however slight a degree is an attenuation of that drug.

Any drug which has been so diluted that one drop of the dilution contains but the one-millionth part of a grain of the crude substance is certainly highly attenuated; the sixth decimal attenuation may, therefore, be considered a high attenuation. But as it is commonly classed among the lower dilutions, I will raise the standard to the twelfth decimal attenuation, which contains the one hundred-thousand-millionth part of a grain of crude drug to each drop of liquid or grain of triturate.

The question of the antidotal and inimical relationships of drugs, which frequently obtrudes itself upon the thoughtful practitioner of homœopathy, is, in my opinion, of very little importance.

To the exclusive Hahnemannian, and to the few who are still implicitly following the dictum of the text books and of their early instructors in the institutes and principles of homœopathy, this

may seem to be rank heresy, utterly subversive of Hahnemannian law and order. Possibly it is, but I hope it is not in opposition to truth; and if judgment be suspended until my argument is stated, no objection can then be offered to any logical deductions made therefrom.

Two crude drugs, without chemical affinity, introduced into the organism, either together or in close succession, do not affect each other directly by individual contact, or by individual action upon each other. They act directly upon the animal economy, and modify each other's effects in this way. It is true that chemical agents do act directly upon each other, and in some instances may by their union produce new compounds even after entering the stomach; but I do not refer to these.

A drug is introduced into the system and its effects are produced. Before these effects are exhausted another drug is given, and the system attempts to react upon it in its usual manner, but is prevented by the deviation from normal health caused by the systemic reaction to the first drug. The result is an effect which is a modification of the simple action of the first drug due to the attempt of the organism to react normally against the second drug without full success. The ultimate result is a condition differing from the normal action of either drug, or the sum of the normal action of both drugs. If, however, one drug be largely in excess of the other, the greater quantity will ultimately triumph, and its effects will develop with little or no evidence of other drug influence.

The same quantity of a drug will not always produce the same effect in every individual, because of the various degrees of impressibility to drug action of the different individuals. This fact is illustrated in an extreme degree in some animals which are not injured by the ingestion of substances that are toxic to man, e. g., Orifila found that dogs were not susceptible to the action of the berries of belladonna. Although some provers may obtain bona fide effects from matter in extremely minute subdivision, yet there is probably a limit to drug attenuation beyond which even the most sensitive pharmacometers will fail to respond. Just what particular degree of material subdivision marks this limit it is difficult to say, but probably the twelfth decimal attenuation would be a safe extreme, or at furthest the twentieth, and to admit of no doubt, we certainly need not hesitate at the thirtieth. I think, therefore, that until facts to the contrary are produced wherein the profound element of subjectivity has been accorded expert analysis, we may safely assert that, so far as proven, no pathogenetic results can be obtained from a drug attenuated above the thirtieth decimal dilution. I also think that all believers in homœopathy will agree that no effect, either good or bad, can be produced upon a diseased system by a diluted drug, unless the attenuation be prepared from a drug that has produced or will produce a similar condition in the healthy organism. That attenuations will affect a diseased organism is due to the increased irratability, and hence greater susceptibility, of the organism to external and internal influences in a pathological condition than when in a state of health. Therefore, unless a highly attenuated drug be homœopathic to the condition or group of symptoms for which it is prescribed, it will have no more effect upon the organism than it will in health, because, though more susceptible to various influences than in health, the diseased organism is discriminatingly susceptible. As a consequence, it is immaterial when drugs are given together or in quick succession, whether they are what is considered dynamically congenial or not, because there must be the proper analogy between the pathogenesy of the drug and the pathological condition of the system for which it is prescribed, *i. e.*, the organism must have an affinity for the drug.

I suggest as a deduction from the foregoing that highly attenuated drugs bear neither an inimical nor an antidotal relationship to each other. I also suggest that a complemental relationship is possible, but that no drug has any particular complement or set of complements.

Any drug that is indicated after another drug has already been used is the complement of the first in that particular case, and unless the pathological condition and resulting symptoms indicate the second drug, an attenuation of the drug will not complete the cure commenced by an attenuation of the first drug.

It is the experience of all physicians that certain drugs are more frequently indicated in certain pathological conditions than are others. Such drugs follow each other well because these conditions usually pursue substantially the same course in every case. It is in such cases that some drugs attain the reputation of being complements. The explanation is obviously and logically because these complements are homœopathic to the different stages through which the disease passes.

Relative to supposed antidotal and inimical relationships of highly attenuated drugs, it may be asked, If these relationships do not exist, why

is it that so many cases apparently illustrative of such relationships may be cited?

It is because where a highly attenuated drug is supposed to have produced an aggravation, the so-called attenuated antidote, when given, either does not act at all, and so allows the organism to recover from the aggravation, or the supposed antidote is simply the properly indicated remedy for the case, no aggravation really existing. On the other hand, when two highly attenuated drugs are supposed to act inimically, the fact is that neither is indicated, and the disease simply progresses regardless of the attenuations used. When the proper remedy is given, be it crude drug or high attenuation, the case improves, providing the inherent recuperative force of the patient does not effect the cure.

It is difficult to decide where to draw the line between the coarse and the fine effects of drugs, but when we speak of toxic effects the question of antidotal and inimical relationships of drugs, which demonstrably exist, must be viewed from a different standpoint from that occupied when we consider relationships in attenuated drugs.

All this explains why the alternation of remedies, or the sequential prescription of medicines usually believed to be antidotal, as bry. and acon., or inimical, as apis and rhus, do not produce the undesirable results that should logically follow if highly attenuated drugs do bear antidotal and inimical relationships. But while attenuation may not be objectionable upon the ground of interference of drug action, or danger of producing complications, yet the practice certainly shows either weakness in the materia medica or individual ignorance of the resources of the materia medica.

It is desirable to the artisan that he accomplish the ideal end in the simplest manner and with the fewest number of tools possible, and so it should be the aim of the practitioner of medicine to cure his cases with the fewest number of therapeutic agents possible; but if the materia medica be too inefficient or he be too ignorant to find one drug that will cure the whole group of symptoms (or two groups, as may sometimes occur when an acute disturbance supervenes upon a chronic condition to which it bears no relation), then let him do the next best thing, give two remedies, until revealed science furnishes the single similimum or the practitioner is able to find it in the existing materia medica, Hahnemann and Carroll Dunham to the contrary, notwithstanding.

The object of this paper is not to advocate alternation of drugs, nor is it to advocate or to condemn the use either of crude drugs or attenuations, any more than it is to condemn the honest utilization of the patient's subjectivity; but it is simply to offer some suggestions which are probably as near the truth as theories upon subjects so difficult of materialization usually are.

December 28th, 1887.

CLINIQUE.

AN OBJECT LESSON IN REDUCING STRANGULATED HERNIA.

BY GEO. M. TAYLOR, M. D., NEW YORK.

ANY physician is liable to be called on for immediate aid in cases of strangulation of hernia. Old cases and recent ones are alike exposed to this accident, and the physician finds himself suddenly confronted with one of the most trying emergencies, demanding not only coolness, but well-grounded principles of action.

He finds some portion of the contents of the abdomen, as a loop of intestine, a portion of omentum, (or both), has become tightly compressed into a bulging sac, having a narrow outlet or connection with the main cavity. The blood enters the sac by the arteries, but fails to escape by the veins, the return flow being impeded and liable to be cut off altogether by reason of the narrowness of the neck and compression of the venous vessels. This causes the protrusion to increase in size, by distention of its vessels and the effusion from them. The part becomes unbearably sensitive, inflamed; vitality diminishes, and is liable to extinguishment, as though separated by a ligature. The size soon acquired by the protrusion forbids its repassing the canal, and mechanical urging is usually hopeless after a limited period has elapsed. Life hangs by a brittle thread, and the responsibility of the medical adviser is very great.

The universal and time-honored remedy for strangulation consists in simply enlarging the canal by which the protrusion escaped from the abdomen and crowding back the contents of the sac. This procedure takes no note of the original cause, makes no attempt at abating such cause, much less of reversing it. One form of danger, that of local destruction of vitality, is diminished, but that of overwhelming the system with suddenly returned morbid substance still exists. And experience proves that under the most approved safeguards, extensive cutting operations exposing interior parts, are dangerous.

There are doubtless many physicians who would be glad to know of a better, or even another

way for them to pursue in these terrible cases. They may be totally unaware that strangulated hernia is reducible, certainly, easily, safely, without cutting, without taxis even. Large size, extreme sensitiveness, tenderness of fibre, and even extensive adhesions, either and all, do not prevent the attainment of the result. The principal prerequisite is a due comprehension of a few easily understood physiological and mechanico-physiological principles which are always involved in the varied forms of rupture.

These principles are neither new nor now newly presented. Their application to morbid conditions of the female pelvic contents was explained in my work entitled "Diseases of Women," published in 1871; afterward and more fully, with ample illustrations, in "Pelvic and Hernial Therapeutics." In the latter will be found directions for the cure of chronic cases and for superseding the truss.

The present object is to take such readers of the TIMES as are interested in this and allied specialties into full confidence by extending to them the benefits of an "object lesson," illustrative of the procedures required for reducing strangulated hernia of every type. It became my privilege, as well as my duty, a few days since to give the instructions herein repeated to two physicians who found themselves with an extreme case of strangulated hernia on their hands. Such details as are usually found in books of surgery are omitted, and for brevity only the fewest particulars compatible with conveying an understanding of the subject are given.

The physicians referred to are long and highly esteemed residents of Chelsea, Mass. Dr. Sibley is the respected city physician, having full charge of the city's poor at their homes. Dr. Wheeler is the venerable and widely known surgeon, who has operated for the relief of hernia in that city and vicinity times without number, and has thirty-one times extracted the ovaries from suffering women. These physicians now have occasion to discuss the query whether both classes of procedures are not supererogatory, and, in the interests of these sufferers, to be dispensed with.

The case presented was that of a very poor laborer of about forty, having a dependent family. The protrusion was of the scrotal variety, and had for more than twenty-four hours been in a state of *strangulation*. Being without means, the case necessarily fell to the care of the city physician, to be attended at the sufferer's home. An easily reducable inguinal hernia had for some time existed on the side opposite the scrotal.

Finding relief unattainable by taxis and by such other means as were at his command, and that the patient was evidently sinking, having for several hours suffered the vomiting characteristic of rapidly approaching fatality, Dr. Wheeler was called on to operate, as that procedure appeared to afford the only hope of saving the man's life. The latter physician, having had his interest aroused in a consultation with me in another case, determined to avail himself of the present opportunity for applying the crucial test, to determine the feasibility of my methods in desperate cases. I was accordingly called in at this very critical stage.

The subject was in wretched surroundings, writhing in pain and frequently retching. The right side of the scrotum was enormously distended, red, sore, tense and glistening. Careful examination indicated that the sac contained a moderate amount of fluid, chiefly at its lowest part, a little air, probably within an intestinal loop, and a hard mass of omentum. In measurement the tumor was about seven inches in circumference by five and one-half long. The preceding efforts to return by taxis had evidently increased every symptom and further complicated the case by greatly exhausting the nervous irritability of the patient. He was constantly writhing, and his face betokened the utmost distress.

The usual assumption that hernial protrusion is a purely mechanical accident, requiring mechanical and surgical remedies only, is incorrect. Physiological defect necessarily precedes the mechanical manifestation. Such defect is therefore the most important factor of hernia. Every case of the kind is mechanico-physiological in its nature, and no remedy can be adequate which fails to affect the curative factor. The potential affection resides in its causes, and the manifestation ceases with the cessation of these.

It was therefore imperative before proceeding with our case, to impress upon the physicians in charge the principle universally applicable, that hernial protrusion is strictly subordinate to its causes, and that however imminent the danger, its most certain, rapid and powerful remedy must operate in the line of causes, and that little, perhaps nothing permanent, is accomplished by merely concealing the manifestation in the usual way.

The problem before us, therefore, reduced to its simplest expression, was that of exposing as clearly as possible the conditions under which hernia occurs, and of *reversing* these conditions.

A little boy about nine years old, at this moment scurrying through the room, was seized upon and readily consented to assist me in mak-

ing clear the *what* and the *how* of the procedures required to remove the strangulation. "A little child shall lead them"—both the lions of tradition and the lambs which meekly follow. The child was to serve as a sort of vitalized mannikin in a rehearsal of principles to be put in practice in this and all similar cases.

The child was laid on the floor on his back, his hands were clapsed on the crown of his head, and he was instructed to hold them rigidly in the same position, and, if convenient, to press with his hands upon his head. My readers will see, as did also my venerable pupils, that in this position, and under the circumstances described, the lateral walls of the chest are drawn widely apart, and rendered immovable. These walls are held apart by distended muscles, and cannot participate in the motions of respiration.

It is further seen that the base of the chest has become as widely distended as possible. The broadening of the base of the chest is necessarily accompanied by corresponding widening of the epigastric region, whose exterior is continuous with that of the chest. The increase of circumference implies increase of space contained therein. The upper region of the abdomen has become more roomy and will contain more. But there is no more to be contained, and no vacuum is possible. It necessarily follows that the whole mass of the contents of the abdomen is shifted upwards —that is, into the space thus caused, and fills it. This change produces flattening of the lower or hypogastric region of the abdomen to an equal degree. The abdominal wall is at this region sucked inward and upward, or, more scientifically expressed, these walls are urged inward by atmospheric pressure.

It is thus shown that one prominent factor causing rupture, gravitation, is entirely and easily removed, and that in place of pressure some degree of traction upward, or *from* the base of the abdomen is produced by the position assumed. If there be an adherent or an incarcerated point of intestine, the whole of the tractive power thus developed would necessarily act upon such point, since no other would be exposed to the effect of such power. A beginning, however slight, would certainly be made in the act of reduction.

If we consider the hernial sac as but a local extension of the abdominal cavity, which it is in fact, and that the space is occupied by fluid, it is apparent that the conditions are such as to invite the fluid *from* the sac *into* the abdominal space. The contents of the sac and abdomen are under precisely the same pressure. There can be no more pressure in the one than the other, because they are practically a continuous cavity, included in the same peritoneal sac. An outflow from one portion of the enclosed space to another is indicated by the condition of the protrusion, just as a guage indicates the level of water in a boiler.

The next is a physiological consideration, which for the present purpose becomes mechanico-physiological. The child breathes, but not in the usual way. The side walls of his respiratory mechanism being immovable, breathing is found to go on independent of their aid. The inferior wall of the chest engages in the respiratory act, both in taking in and expelling air, but no other part. The motions of respiration are changed from a resemblance to a bellows in which the sides move into that of a piston, in which one end only moves. When the piston—diaphragm—moves up, air is expelled, the average amount for an adult being about thirty cubic inches. As the space below must be filled, the contents of the cavity below the diaphragm necessarily moves up to fill it. The whole of the motion of the diaphragm is thus transferred to the exterior wall of the abdomen, and this wall therefore rises and falls to that exact extent. In this act, which is repeated eighteen or twenty times per minute, the whole of the contents between the two walls, the diaphragmatic and the anterior abdominal, are displaced to the extent of the number of cubic inches of air that is coincidently expired and inspired.

The force impelling the abdominal contents in the direction of the diaphragm extends through these contents to the inferior end of the cavity. Should a loop of intestine be attached to any point at the inferior wall, the whole impelling force falls on such attachment in the form of tension, unless the attachment be rent. Even slight motion, as well as reciprocating motion, under the circumstances involves tension, with tendency to liberation of attachments. By carefully watching the respiratory motions of the child it is clearly seen that they would, under the circumstance, be resolved into tensive force and tend to liberate any adhesions which might exist.

A very important addition may now be made to the upward impelling power of the combined respiratory muscles. This is secured through *reflex incitation*. Placing a hand on the child's abdomen, the respiratory movements are seen to increase in force. Applying compression causes organic resistive power to become centered at that point. By varying the pressure to correspond with the respiratory rhythm, the rhythm is made to act conspicuously deeper, and apparently to concentrate all available muscular power in moving the abdominal contents. This additional

force would become very effective in disengaging hernial attachments at the lower portions of the abdomen. The control of fluid contents of the sac is also increased by the same means. By changing the position of the hand and making compression synchronous with respiratory rhythm, it is shown that rhythm is not only greatly increased in extent, but its direction is controlled; it is guided to the hernial region. The displacement of abdominal mass occurs directly under the hand and nowhere else. The force thus developed is interior, positive, and opposes adhesion of the incarcerated intestine.

The next step in our object lesson shows how *additions* to an indefinite extent, certainly to a sufficient extent, may be made to the forces already pointed out, operating both to drain the fluids and extract the solid tissues from the canal and sac. The child's feet were drawn up so as to be in contact with his buttocks, his hips were raised till the thighs and trunk were in a straight line, inclining from his knees to his shoulders, the feet and head remaining on the same level. It is now seen that the intestinal mass lies on a plane inclining *from* the hernial region, and that it is therefore subject to gravitation acting *from* that region. In the position described the diaphragm is practically *below* the pelvis and the hernia and its attachments are, in fact, at the highest part of the cavity.

It follows that in case of hernial attachments the imprisoned knuckle of intestine or omentum would supply the chief obstacle to the gliding of the whole abdominal mass away from the lower boundary of the abdomen. The weight of this mass would therefore become practically *suspended* at the hernial neck, and the whole force of such weight would be applied to the separation or the release of the attachment.

It is therefore clear that the tension at the hernial neck produced by the respiratory movements are, under these circumstances, reinforced by the weight of the abdomen, and that this weight, applied in the oscillatory form of respiratory rhythm, is a form greatly facilitating the disengagement of attachments of any kind.

The anatomical parts are now so mechanically disposed as to favor the use of force, additional to that of gravitation, and co-operating with it. This force is easily supplied to any desired extent by means of compression. The hand is laid upon the hypogastrium, close to the symphysis pubis. On bearing down, the hand sinks into the abdomen, urging the whole abdominal mass before it. The weight or force thus applied puts a severe strain on the hernial neck, which offers the only resistance. The tension thus caused at the neck is upon the interior and sound segment of the imprisoned intestine. It is painless and cannot be injurious, however inflamed the contents of the sac, because it reaches these contents only in mild degree.

The intestine is elastic under longitudinal strain. Consequently, tension narrows its caliber at its entrance to and even within the canal, where tension reaches. The diminution of bulk of the incarcerated intestine mechanically facilitates disengagement from the walls of the hernial canal. The canal itself is straightened by the tensive pull at the intestine, abolishing sinuosities, sharp edges of tendons, fibres and other mechanical obstacles to reduction.

The mechanical conditions afforded by interior traction are, in fact, exactly the reverse of those of exterior pushing, whether under the name of taxis or any other. While the one is painless, easy and effective, the other not only fails, but even compromises the life of the patient by its mechanical irrelevancy.

But the more solid contents of the hernial sac, as the intestine and the omentum, are serious obstacles to reduction only in appearance. Remedies directed mainly to these are in a large degree misdirected. When proper and adequate provision is made for the return of the fluid contents of the sac, strangulation is removed and reduction practically secured. The solid contents of the sac then fall into the cavity of the abdomen without trouble, hardly requiring the need of the force above pointed out as available for that purpose.

By far the larger part of the contents of the sac are fluids. These consist of the contents of the blood vessels, the serous fluid exterior to these, and the moisture of the tissues themselves, greatly exaggerated by effusion.

The morbid tension is caused by superfluous fluids. These being stagnant and unrefreshed by the circulation, are greatly predisposed to decomposition. It is in this that the imminence of danger to life lies. To restore the circulation is therefore both to remove destructive tendencies and the tension of the fluid in the sac at the same time. To secure these results it is only necessary to restore the patency of the venous channels which are continuous between the sac and the abdomen. To open these channels removes the pent up fluids. They then readily pass into and mingle with the general circulation, and are subjected to the chemistry of the organism. The fluids of the sac being disposed of, but a few shreds of membrane actually remain. The camel re-

duced to fluid, cheerfully passes through the needle's eye.

We may now call attention to the provisions ready at hand for removing the fluids of the sac.

It will be noted that the position of the child is such that while the head and feet are at the same level, the contents of the abdomen are practically reversed so that the hernial sac and contents are uppermost and at a higher hydrostatic level than those of the abdominal cavity. There must therefore be a tendency to spontaneous transfer of the fluid contents of the sac to the abdomen by force of gravitation, in compliance with well known hydrostatic laws. Boilers are fed on this principle, even against pressure. If it be presumed that the interior of the sac has increased pressure from the swelling, such transfer would thereby be assisted. In any case, the position alone is exceedingly favorable for the drainage of the hernial sac, and for surmounting all obstacles thereto.

The force arising from respiratory rhythm is however, more than ample for this requirement under all emergencies of hernia. It has already been shown how this force may be amplified and made to converge to the point where it is needed. Under the conditions, respiratory rhythm is an *aspiring* force. The solids may be restrained by the narrow and tortuous canal, but there is no obstacle to the outflow of fluids, when differences of pressure are produced by interior aspiration, or suction. The fluids in mass may refuse to be driven by exterior pressure, but are quietly and easily withdrawn in the minutest capillary streams by aspiration.

The aspiration of rhythm operates in two channels to remove the fluid contents of the hernial sac. It impels the contents of those branches of the abdominal venous vessels which extend into the neck and reach the sac. This power literally sucks the venous blood out of the sac through its natural channels. It is the same power that aids the return circulation from the extremities against gravitation. It also acts in like manner upon the superficial area of the transverse section of the neck, regardless of structure or vitality, as fluids pass from the wet to a dry portion of sponge. Thus, every minutest venous vessel is compelled by aspiring or suction force applied to its proximal end to yield its stream, while the same power is exerted upon the whole area from within the abdomen. The fluids of the sac necessarily yield, and so continue till the removable fluids are completely exhausted. In this way the strangulation is practically removed at the very beginning of the process, because its beginning restores the circulation, and the reduction is completed by the removal of the fluids.

The time required of our little boy to assist in illustrating the mechanical and physiological principles above detailed, including the requisite explanations from me, was less than two minutes. As a certain degree of familiarity with these principles by the physicians in charge was necessary to inspire them with confidence for managing the case, I thought it best to extend the lesson by including another process, which might be used or not, as the emergency might seem to require.

To this end I instructed the child to turn over and lie face downward. The elbows were so placed that the upper arms were perpendicular, while the body rested upon them. My right arm was then put under the child's thighs, while his legs were seized by my left hand. The act of raising body and limbs upward and backward till the arms, body and legs were in a straight diagonal line, meeting the floor at the elbows, was then performed. The whole body was allowed to remain in this diagonal position a moment, and then the original lying position was resumed.

But little explanation is required to understand the effects on hernial protrusion of this maneuver. In the position assumed the belly forms a pouch, into which the contents of the lower abdomen fall. The gravitation produces strong tension at the hernial neck. The subject instinctively struggles, contracting strongly the muscles of the abdomen. This act in the position described becomes auxiliary to gravitation, making a still stronger pull at the hernial attachment.

As in the process before described, the position of the arms is such as entirely to preclude the participation of the exterior walls of the chest in respiration. This work devolves solely on the diaphragm. Every respiratory motion, therefore, produces traction of the hernial neck and aspiration of the hernial fluids. The force of such traction and aspiration is equal to the weight of the intestines, the muscular struggle of the abdomen and the piston-like action of the diaphragm together. This latter factor is enormously increased by the tact of a well experienced operator, who is able by a quick backward motion, almost a jerk, to give a sudden expansion to the diaphragm. This increases the area of the piston-diaphragm at the very instant of its upward motion. The added force is easily capable of sundering such adhesions of the neck and its vicinity as may have been caused by preceding inflammations, besides greatly hastening the exit

of fluids from the sac. The process should be several times repeated. The child, having been detained less than one minute for this second demonstration of principles of mechanico-physiology in their application to reduction of strangulated hernia, was now allowed to go to his play.

The two physicians having become in a manner equipped with knowledge of elementary principles, it remained to see that the sufferer was immediately benefited thereby. For want of room and conveniences the patient was allowed to remain on his bed. He was still evidently retching, which greatly increased the difficulty of controlling his position. His hands were made to clasp over his head, but could hardly be kept there; his hips were indifferently propped up from eight to twelve inches with pillows, and his feet were placed closed to his body. The doctors replaced his hands as often as displaced by struggles, while I industriously applied the variable compression with stroking motions, so applied as to urge from the pelvis the mobile contents of the abdomen. Soon it became apparent that the contents of the lower or pelvic portion of the cavity were receding; that the mass was being shifted toward the diaphragm, the exterior wall next the pelvis becoming depressed. This change of exterior form signalized tension of the hernial neck. It also indicated a *tendency* to less pressure in the abdominal portion of the cavity, consequently meant *aspiration* from the sac. A strong force within the abdomen was evidently engaged with the proximal portion of the incarcerated intestine, diminishing its fluids and the caliber of its vessels. The patient lapsed into quiet. In five minutes the contorted features were changed to a wreath of smiles. In a similar short period I called the attention of the physicians to what they had heretofore treated as the cause, rather than the consequence, of the affection, the strangulated gut. Already the soreness and inflammatory appearance of the scrotum had departed; the tumor was handled without complaint; the fluid contents were diminishing; the glossy, tense surface had given place to minute lines of wrinkles and to a dull color. The solid portion of the contents of the tumor were driven hard and immovable against the exterior end of the canal.

The application of a bag of pounded ice to the scrotum was at this point recommended, to assist and to expedite the contraction so well begun. A firmer support for the hips was found in the wife's ironing board, one end being placed on the footboard of the bed and the other slid lengthwise under the patient's body, thus easily maintaining the hips a few inches higher than the chest, while the feet and head were on the same level. The aid of compression by the hand applied as before described was resorted to at short intervals, care being taken to impart an urging and sliding motion *from* the pelvis. This increased the aspiring as well as the tractile force concentrated upon the protrusion.

The two physicians had been attentive observers and listeners. They seemed to apprehend and appreciate the principles I had undertaken to enforce. They now witnessed the verification of my statements, and felt that not theories only, but practical facts had engaged their attention. They had already become confident of their ability to carry out the execution of these principles in the present case without further assistance from me. I had been with them about twenty minutes when I withdrew.

The next morning Dr. Wheeler called to inform me of the complete success of the treatment, and gave some pleasant details of its progressive stages. To obviate any suspension of the curative process during the night, Dr. Sibley took the precaution to tie the patient's hands above his head before leaving him. Dr. S. also visited him during the night, to assure himself that the case was advancing and the patient's comfort increasing. On returning in the morning the sac had shrinken nearly to its natural dimensions; what little substance remained of the protrusion immediately receded on placing the hand upon the scrotum. A letter ten days afterward assured me that no relapse had occurred, and that the patient was practically well and able to be about.

This method of reduction of strangulation is universally applicable and trustworthy. It should always be relied on from the first. Relief is almost immediate, although hours, perhaps days, may be required for the whole protruded mass to disappear. The interior pressure and the strangulation are practically overcome by the transfer of the first drops of the fluid contents of the sac to the abdomen, whether through the veins or otherwise. Such transfer is certain under the aspiring and traction forces described.

The above are details of processes for strangulation. For permanent and radical cure of *chronic* cases much more is required. This may be summed up in the word *cultivation*. Full details of methods are given in the work before referred to.

Hay Fever Cure.—Dr. Morehead writes in the *British Medical Journal* that he has obtained relief from hay fever, his annual persecutor for thirty years, by hypodermic injection of one-twentieth of a grain of morphine and one two-hundredth of a grain of atropin night and morning. The relief was complete.

A SHOULDER PRESENTATION.

BY G. H. SIMMONS, M. D., LINCOLN, NEB.

I REPORT the following, not because of its being in any way remarkable, but simply as a case in practice, and to urge on my fellow-practitioners the value of action. On the 1st of December I was called about 3 p. m. to attend Mrs. R. in labor. She had been having pains for about twelve hours when I arrived, and on examination I found the os partially dilated. With difficulty I made out the presentation to be that of the shoulder. I tried the bi-manual method of turning, but failed, from the fact that, as I now discovered, I had a case of twins to contend with also. Having to make an urgent call, I left, and returning in about two hours, I found there had been no progress at all. The woman had been having very severe pains all this time, and was becoming discouraged. "What is best to be done," of course was my thought. The books—many of them—urge waiting till the membranes rupture, and then turn. But I could hardly relish the idea of waiting an indefinite period for that to happen, and meanwhile not dare to leave. Those who have had experience know how difficult it is to turn when the uterus is freed from the fluid and contracting on the fœtus. My practice is to turn by external manipulation, or by the bi-polar method, but in this case, being twins, it was impossible. I waited two hours more, during which time the os had become thoroughly dilated, and no further progress was being made. After realizing that nature had done all that she could do till the membranes ruptured, I inserted my hand, and with difficulty, for they seemed very tough, I ruptured the membranes. Allowing but little of the water to escape, I forced my hand into the uterus, high enough to seize the foot. Bringing this down, I delivered the first child without difficulty. The second was born without assistance in three-quarters of an hour.

Now, I am aware there is nothing very remarkable about this case. Yet I am satisfied there would have been had I not interfered. As it was, it was the simplest thing in the world to turn from the fact that the waters were not allowed to escape. Without taking into consideration the fact that hours of agony, if nothing worse, were saved to the mother, such a course is *always* advisable, from the fact that the physician has the case in his control and can terminate it without danger to either mother or child. Prompt action at the right time would have changed many a difficult and oft times fatal case. I well remember a case in point I was called to see, in consultation, some two years ago. The woman had been in labor for a considerable time, and the physician in attendance—"a recent graduate"—had not been able to make out the presentation till after the membranes had ruptured, and then he found that he had a shoulder. He waited to see if nature would not right matters, but before long the arm came down, and after awhile sent for council. The doctor he sent for did not respond for some time, being out making a call, and I was called. Before I arrived, however, No. 2 had put in an appearance. They had been, and were attempting to turn, the woman being under chloroform, but they were unsuccessful. I attempted to seize the foot, but the uterus had grasped the fœtus with such intensity that I could do nothing. After further attempts, the woman being completely under chloroform, I finally succeeded in bringing down the foot and delivering the child—dead. The mother never rallied, and died in four hours. Of course the neighbors thought it was all right, for had they not had three physicians? But I know that that woman was murdered, through the ignorance of a man who held the certificate of qualification in the shape of a diploma from "a regularly chartered medical college." I will not make further comment.

HEMATINURIA. FERRUM PHOS.*

BY C. E. LANING, M. D., CHICAGO, ILL.

THIS disease, while comparatively rare, is nevertheless considered to be more so than it is, from the fact that practitioners very frequently mistake it for hematuria. This may very readily be done, and if a careful analysis of a case be not made, including a microscopic examination of the urine, a positive diagnosis cannot be arrived at.

As an illustration of the above I will cite a case which has come under my observation:

Some months ago a gentleman came to my office to consult me in regard to hemorrhages he was having. Being asked where the hemorrhages were from, he replied he did not know nor could any of the doctors decide that point, but he had been referred to me with the hope that I might at least locate the lesion and discover the cause of the hemorrhages.

I elicited the following history of the case: About a year and a half previous to his consulting me he had drunk a little blackberry brandy with a friend, and on passing urine shortly after, noticed that it looked quite dark and red, but

* Abstract of a lecture in the *Clinique*, June 15, 1887.

thinking it was only a temporary effect of the brandy he did not pay much attention to it. On evacuating the urine into a vessel he observed that it appeared to be highly tinctured with blood. He then consulted a physician, who diagnosed the case as one of rupture of a small vessel in the bladder, and gave the patient some medicine, assuring him that he would soon be all right. And so, indeed, he seemed to be in a short time; the color disappeared from the urine, and he regained his normal condition in every respect. Very soon, however, the hematuria, as it was considered to be, reappeared, and this time remained persistently in spite of all treatment. At times it was checked by the use of quinine, which the patient occasionally took for a feeling of general debility, accompanied by ill-defined sensations of chilliness. He observed that always, for a short time after taking the quinine, the urine became normal for a little time. No significance was attached to this fact, however, in the way of leading his physicians to a correct diagnosis. There was no history, nor evidence in the least, of a strain or blow which might have caused the hemorrhage, nor was there evidence of any lesion of the urethra, bladder, ureters or kidneys, of a nature to give rise to such profuse and persistent bleeding.

In my presence the gentleman passed about six ounces of urine, or rather what appeared to be so much blood, of a dark red color. He assured me that with few exceptions the evacuations from the bladder resembled in quantity and appearance that which he had just passed.

I was obliged to arrive at my diagnosis principally by exclusion. My first hint in the right direction was gained from his statement in regard to the effect of quinine upon the hemorrhages. At once, thinking of its action upon the red corpuscles, I was convinced that the lesion, at least so far as the hemorrhage was concerned, was in these minute cells. As all physicians know, or should know, a blood corpuscle has its birth, life and death just as all cells or aggregations of cells do. When the corpuscle is growing old, like an old man it becomes crenated, and the ruddy color of youth fades from it. Under some conditions, as with man, it loses its color and becomes wrinkled prematurely. If now a large number of corpuscles become so affected at a given time in an individual, what is the result? Let us trace out the changes which take place when the discs die a natural death, so to speak. As has been stated, they become shrunken and lose their coloring matter. What becomes of this pigmentary substance? It is taken from the old corpuscle as it passes through the liver; it is taken from the dying disc as it rolls on through the current of blood, but after it is all out, the liver collects or strains it from the blood which passes through that gland, and uses it as coloring matter for the bile, making the so-called bilirubine, which after further oxydation becomes biliverdine.

Now we are prepared to understand what does, what must take place if the corpuscles die prematurely and in abnormally large quantities, an excess of coloring matter is thrown into the blood, more than the liver needs or can make use of. As the organs most nearly related in function to the liver, so far as excretion is concerned, come the kidneys. The liver, the kidneys, the skin, and lastly the mucous membranes, hold, in the order named, a vicarious functional relationship, as it might be termed, to each other. The kidneys then, in such a case as has been stated above, would naturally excrete, throw out of the blood, the excess of hematine, and as a consequence, there would be passed from the bladder a fluid resembling dark blood, or about the color of old port wine. What had the quinine to do with my patient's case? Simply this, as I have already said: when a corpuscle is sick it shrivels and shrinks and loses a large per cent. of its coloring matter; that is the condition of the greater proportion of discs in the disease under discussion, rather than one of absolute premature death. In such a state then, quinine, if given subcutaneously or per os, very soon causes the diseased discs to resume their normal shape and color. Experiment, conducted in a thoroughly scientific manner, has demonstrated this beyond doubt. The arrest of the "hemorrhage" under the action of the quinine is thus readily explained. We need not go any farther into the case as regards the effect of quinine upon the discs. It is sufficient to know that in this particular case its action was not permanent or curative.

Feeling positive that the corpuscles were involved in the manner above described, the next step was to see what caused them to be so affected. As I have always claimed that all disease originates in or implicates the nervous system more or less extensively, so I believe that in this case it must have been at fault. Of course we know that it would be impossible for any direct connection to exist between the discs and the nerve centres. How then are they influenced through these centres? Certain blood glands, as the spleen, liver, and thyroid, have a decided effect upon the chemistry of the blood, particularly upon the discs. The nerve centres then, which control these organs are the ones which exert an influence upon the corpuscles. So far as we know, all

the functional activity of a gland is transmitted to it through fibres of the sympathetic system. Therefore, in the centres of origin of the sympathetic nerves distributed to the spleen and liver, should be found the real lesion which gives rise to hematinuria.

The iron and the coloring matter of the corpuscles sustain an intimate relationship to each other, so that if the one is lacking the other is more or less lacking also. Thus, if the disc is deficient in iron, it is not capable of absorbing, so to speak, or of retaining, a normal amount of hematine. These substances being diminished beyond a certain proportion in the discs, lowers their power of carrying oxygen, hence the weakness of the nervous system in general, the health of which depends so largely upon this function of the blood cells.

We can now see why the patient, a naturally hearty man, felt occasionally the depression and languor and chilliness of which he complained, and for which he took quinine with decided though temporary benefit. Such a patient must of necessity be unable to sustain any prolonged or severe exertion such as might formerly have been undertaken with impunity. He will "get out of breath" more easily than usual, because the increased demand for oxygen, which is always set up when tissue changes are taking place—i. e., as the result of physical exertion—cannot be supplied on account of the diminished oxygen-carrying power of the discs.

I may here state that a microscopic examination of the urine confirmed my diagnosis, there being but few corpuscles present, none at all in some of the fields, and most of those seen were old broken down ones.

And now, having followed the case out so far, what shall we do to cure the patient? He has had Old School and homœopathic treatment without avail. The only relief has been from quinine, and this, as we have seen, was merely transient. The human body is a piece of mechanism—very delicate, very wonderful, it is true, but nevertheless subject to the same general laws as other mechanisms, *plus* vital action. If in a watch one wheel, one pinion or spring be out of order for any length of time, other parts of the machine become deranged, so that, even if the first lesion be removed, others which have been developed as a result of it will still keep the whole from working harmoniously. Therefore, when we endeavor to repair, to rebuild the human organism, let us, if possible, put all its parts in a normal condition at the same time.

Pardon this digression, it is made for the purpose of rendering the treatment and its results more clear. Besides the oxygenic function of the blood cells, they also contain the glycerized phosphates. In short, the nervous system gets its nourishment almost exclusively from the discs and not from the plasma; and just as an unbalancing of the proper proportion of iron affects the ability of the corpuscle to retain its due amount of hematine, so also do derangements of this kind affect its power to absorb and distribute to the nerve centres the form of phosphates just mentioned. Having this condition present in our case—as shown by the symptoms—having a functional derangement of the liver and spleen back of it, and back of all, a functional derangement of the nerve centres controlling these organs, I gave as a remedy, ferrum phosphate, known to act upon said centres, causing on the one hand the condition present, in a greater or less degree, or on the other hand removing it. It was given in the third trituration, two grains three or four times a day. In four days the hematinuria had ceased, after virtually having been present for one year and a half, and up to this time, several months since the date of the prescription, there has been no return of the symptom whatever.

Prevention of Sea-Sickness.—Prof. William James writes to the *Boston Medical and Surgical Journal*, suggesting that by counter-irritation over the mastoid processes, sea-sickness may be prevented. He was led to this idea by his experiments with deaf mutes, whom he found to be singularly exempt from sea-sickness. In his own case, Prof. James thinks that he prevented an attack by simply using friction over the mastoid processes.

Dietary of Phthisis.—A valuable article on this subject by Dr. J. Milner Fothergill (*Jour. of Reconstructives*, April, 1887) concludes as follows: Finally, my experience leads me to express the following opinion, deliberately with a full consciousness of the gravity of the subject. If persons born with a phthisical tendency were properly fed with a full knowledge of what was good and desirable for them from the first day of their existence onwards and upwards. As soon as they were of years and intelligence to comprehend to have explained to them how they carry their life in their own hands. How too, very often, their food inclinations are not in harmony with their tisue-wants, and must be struggled with. If this were done we should be spared a very considerable proportion of our cases of pulmonary phthisis.

Myrrh as a Prophylactic Against Infectious Diseases.—Femple (*Pharm. Post. et Bolletino Farm.*, xxvi, 1887, 18) recommends the placing in the mouth of a fragment of myrrh if one finds oneself in an infected atmosphere, and he has employed this means with happy results in several epidemics. He considers myrrh to be a specific against contagion. Physicians in the East use this means constantly in visiting patients.

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The rallying motto of a Sectarian name is incapable of exciting to sober, calm, scientific investigation; it only rouses the explosive spirit of accusations of heresy to a fierce, volcanic flame.—HAHNEMANN.

NEW YORK, FEBRUARY, 1888.

JURY TRIAL IN MEDICAL CASES.

IT is a question if in many cases, especially those where the most important testimony is of a medical character, the trial by jury is not more of a travesty upon justice than justice itself. A jury is gathered, not always of the most intelligent character, many of whom are entirely unaccustomed to analyze evidence or even group together facts intelligently, and to these men conflicting statements, delicate scientific questions are submitted, and the decision, which is often influenced one way or the other by a desire to terminate the case and get home as speedily as possible, is accepted as a verdict. This may be so entirely contrary to law and evidence that an appeal is taken or a new trial obtained, in either case followed by long delay and large expenses. The almost farcical character of this kind of trial was forcibly illustrated in the case of a Mrs. Fisher, who sued the city for twenty thousand dollars, damages for injuries received in stepping into a hole in the street, on getting off a Madison avenue car, in the evening, producing, as she claimed, concussion of the spine, followed by partial paralysis, softening of the spinal cord and an utter wreck of health, which must end, in a few years, in death. Her physician, Dr. Ranney, testified that she was ruined in bodily health; that there were two soft places in her spinal cord, and that in a very short time she would die, and that all her troubles were the results of her fall some three years before, and for which she now sought to obtain compensation from the city. The defense, which was supported by strong testimony, both medical and otherwise, was that there had never been concussion of the spine or any permanent injury, but that the case was simply one of hysteria, having no connection with the fall, and which could have easily been cured, and might now, if proper mental stimulus were brought to bear upon her. The trial lasted ten days. The jury failed to agree, and came pretty near getting into a fight in the jury room, and called each other hard names in open court. The strictures of the press upon the action of the jury were so marked that the foreman, who seemed to be a man of very decided intelligence, made public a statement of their action in the jury room. All agreed that a verdict should be given for the plaintiff, but when the amount of damages was to be calculated the difference was all the way from one thousand to twenty thousand dollars. Some of the jurors were so anxious to get home that they went from one thousand to twenty thousand, and were willing to give anything to get away, soothing their conscience with the fact that the money would come out of the city, and if it was not given to the plaintiff it would be stolen in some other way. And so the whole case has to be tried over again at an enormous expense both to defendant and plaintiff.

In this class of cases, to say the least, it seems to us that trial by jury, as the jury is ordinarily selected, is a failure, causing often not only enormous expense, but a miscarriage of justice. The Napolionic code has the advantage that the ends of justice are not thwarted by a lack of intelligence of those who are to decide the question, and that there is less danger from corruption than from ignorance.

ANÆMIA.

SIR ANDREW CLARK mentions an important factor in the anæmia which is very common in girls about the time of puberty, and which is apt to be entirely overlooked, as the girl will seldom mention it unless attention is specially directed to the subject. This factor is the tendency to constipation at this period, in which the system becomes clogged and the effete materials, accumulating and remaining in the bowels, undergo a chemical change, in which the poisons of ptomaine and lenkomaine classes are found, which absorbed into the system give rise to all the conditions of anæmia from mal nutrition. Instead of dosing the patients with iron and a variety of bitter tonics a much better course would be free and repeated evacuations of the bowels. Our fathers, in their favorite prescription of *elix-prop*, of which the ingredients were aloes and myrrh, recognized the fact that the liver, bowels and portal circulation must be kept in active condition, without understanding what modern science has revealed to us in the action of the poisons generated in the bowels when packed with fecal matter, upon the entire system. Chemistry has given us much better remedies than the old purgatives of our fathers, in agents which are gently laxative and also nutrative, such as cascara in combination with maltine. A girl fifteen years of age, who had never menstruated, was brought to us a few weeks ago so anæmic that she was only able to make slight exertion and had lost all relish for food. She had taken the line of tonics and uterine stimulants often prescribed, with no effect except for the worse. The bowels were so constipated as to require mechanical aid to produce an evacuation. She was placed upon the daily use of a combination of cascara and maltine for several weeks in doses to suit her condition. In a few weeks the bowels were moving naturally, the old dyspepsia had vanished, the relish for food had returned, the emaciation was checked and the color restored to cheeks and lips. The menstruation was speedily established. This is only one of many cases of the kind we might quote where the whole trouble could have been prevented if the mother had been instructed by her physician or by a study of physiology of those simple elementary truths which should be familiar to all. It would be an easy thing for the physician to instruct every mother of daughters to watch carefully the conditions of the kidneys and the bowels at the time they are rounding into puberty. This ounce of prevention might save long continued suffering.

A NEW MICROBE.

FROM the University of Tokio, in Japan, comes the news of the discovery by the professors of anatomy in that institution, Dr. Disse and Mr. Takaki, of a new microbe. The syphilitic microbe, as it is called, was found only in persons who had been directly affected with syphilis, or when it might have been hereditary. Some few years ago, if we mistake not, Dr. Salsbury claimed to have discovered in the blood of syphilitics little shining discs, which could only be found where that disease had existed. Possibly Dr. Salsbury's skill as a microscopist or the excellence of his microscope enabled him to see what very many other microscopists have sought for in vain. Some time ago Dr. Klein, a distinguished bacteriologist in England, attempted to show the existence in cows of a disease similar to scarlatina, and stated that the genuine scarlet fever was communicated to children and grown people through the infected milk. Quite recently Dr. Crookshank has reinvestigated the subject, and in a report before the Pathological Society of London shows the incorrectness of the conclusions of Dr. Klein, inasmuch as the micrococcus seen by him both in the diseased cows and in scarlet fever are not the cause of the trouble, but are simply a septic organism associated in all probability with putrefactive changes. Bacteriological work is so exceedingly delicate that even the most skilled are so apt to be mistaken that we shall require the confirmation of other microsopists before the discovery of the Tokio professors is fully established. It is very evident, however, that the zealous and intelligent studies of the chemist and the microscopist are every year throwing more and more light upon the obscure origin of disease.

AN "ORGANON SOCIETY."

THERE has been organized in Boston a "close communion" association, to be known as the "Organon Society." There were present at the first meeting fifteen out of a possible twenty-one. The object of the society is the study of "Hahnemann's Organon."

In the report of the first meeting we learn that "the sixth foot-note was a fertile source of discussion, as to whether coffee should be used in settling the stomach after vomiting; or whether in a paralyzed condition from overeating, sips of strong coffee should be taken in order to strengthen the stomach that it might throw off its contents. It seemed to be the sense of the meeting that while such things were much better than giving emetics, or anything of the sort, the indicated remedy would be one that would be required."

The following are Hahnemann's words, which the society apparently does not approve: "But if, after having been filled beyond measure, the stomach does not possess, or has lost the irritability necessary to produce spontaneous vomiting; and the patient, tormented by acute pain of the epigastrium, does not experience the slightest desire to vomit, in such a state an emetic would only cause a dangerous or mortal inflammation of the intestines; whereas, slight and repeated doses of a strong infusion of coffee would reanimate the depressed irritability of the stomach, and place it in a condition to evacuate of itself, either upwards or downwards, the substances contained in its interior, however considerable the quantity may have been."

It seems, so far as we can judge from reading the minutes, that the society was not unqualifiedly in accord with Hahnemann's teaching, and thus discredit is thrown upon all he has written. This shows the natural tendency of the age to read and criticise as it should, regardless of the standing of the authority criticised. This is the only proper course, and, we surmise, the very one Hahnemann himself would approve, were he present. But this is not the impression one would get in reading the views of the so-styled Hahnemannian of to-day; he leads us toward infallibility, and condemns as mongrel all who do not revolve in his little horizon.

In Hahnemann's "Lesser Writings" we find the following at page 21, which may surprise those who are not familiar with his literature, and we would suggest it for discussion to the "Organon Society:" "For the proper treatment of gohorrhœa, however, in order to remove the superficial inflammation of the urethra and to make it insensible to the irritation of the venereal matter (the most important consideration in the second stage), we should inject as often as possible into the urethra as far as the seat of the gonorrhœa, a fluid which possesses the power of doing both these.

"Three grains of opium are to be dissolved in thirty drops of sweet spirits of nitre, and the solution mingled with an ounce of water which contains three grains of acetate of lead in solution. The thin tube, an inch and a half long, of the small tin syphon here delineated,* is to be carefully inserted into the fore part of the urethra, whilst the penis is allowed to hang down; the funnel-shaped part of the instrument is to be held betwixt the fore finger and thumb of the left hand, and the tepid fluid above described dropped into the funnel-shaped opening of the small syphon ten or twelve times a day, each time for a minute or longer.

"The fluid overflows out of the narrow end exactly at the ordinary seat of the gonorrhœa, and forces its way down by the side of the instrument, and out of the mouth of the urethra; whereby only those parts of it are moistened which require the application of the remedy. The patient performs this little manœuvre himself most readily when standing. He can thereby do no harm. All the inconveniences of the ordinary syringe are obviated by this contrivance. (The patient should previously make water each time.)

"Even when there is great sensitiveness of the urethra, so that the syringe dare not be employed, this operation may be performed, and that without difficulty. The rounded end of the tube should be moistened with milk or cream before being introduced into the urethra. We may increase the opium and acetate of lead in the one

* A cut of the instrument is shown.

ounce of water gradually to five grains of each." At page 26, in speaking of inactivity of the urethra, Hahnemann says: "One, two or four grains of caustic potash or corrosive sublimate dissolved in eight ounces of water will form the best injection for this object."

The whole chapter would form an interesting subject for discussion, and we should be glad to read the views of Hahnemann's present disciples upon his earlier writings.

DR. BILLINGS, in his Lowell Institute address, says, in discussing medical education: "The laws of life can only be known through the phenomena of mind, the laws of mental phenomena can only be studied through those of life, of life in abnormal as well as in normal conditions. Almost every day of his life the physician has to take into account mental peculiarities, if he does not degenerate into utter routine and formalism, and therefore it seems to me that a part of his education should consist in learning something about them. Those who condemn and deprecate metaphysics and philosophy as unpractical and useless studies for a physician, will in the next breath tell you that a successful doctor must be a good judge of human nature. How is it, then, that one should acquire this judgment if not by the study of the phenomena of human nature, which I suppose to mean mental phenomena. It is perfectly true that the great majority of works on mental science are of little use or interest to the medical man, because they have no physiological basis; but this simply proves a defect in the method of study and not the worthlessness or unimportance of the subject. It is not all a question whether the physician should philosophise—that he must do—the only question is whether he shall do it well or ill."

THE Adjutant-General of the New York National Guards has issued a general order providing for the establishment of an ambulance corps of the State, modelled on the corps recently established in the regular army. The corps will consist of the hospital steward of each regiment or batallion and three enlisted men from each company of seventy-five men and two enlisted men from each company of less than that number. The corps is to be under the regular orders of the senior medical officer of the command to which it belongs. An annual course of instruction is given by the medical officers, which includes the diagnosis, aid and treatment of the common accidents and diseases to which the militia are exposed, stretcher drill and personal and camp hygiene. The good effect of the ambulance corps will not be confined to the camp, but the instruction received in the accidents so likely to occur everywhere, and in the principles of hygiene, will be carried to the home of the soldier to the benefit of the entire community.

DR. NEWTON M. SHAFFER, surgeon in the New York Orthopedic Dispensary and Hospital, has commenced, at the request of the trustees of the institution, a course of free lectures on orthopedic surgery at the hospital, 126 East Fifty-ninth street. Dr. Shaffer's long experience and skill in this department of surgery will give a more than usual interest and importance to his lectures.

DR. ALONZO B. PALMER, Professor of Theory and Practice of Medicine and dean of the faculty of the medical department of the University of Michigan, died December 23, in the seventy-third year of his age. Dr. Palmer will be remembered as the leading crank of his day and generation upon homœopathy. The very name excited him as the red rag a wild bull in the arena, and any one tinctured with the heresy he considered a personal enemy.

SOME idea can be formed of the enormous production of alcoholic liquors in this country from the fact that out of the $118,000,000 collected by the United States Internal Revenue Department, last year, some $70,000,000 was collected as taxes upon the distillers in the States of Ohio, Illinois and Indiana. Thus nearly two-thirds of the entire amount of money raised by the Internal Revenue Department of the United States was collected in three States from one product alone. How large an amount passed into the coffers of the Treasury from this industry

from other States might be ascertained by consulting the records of the department, but who can estimate the misery and crime, the poverty and degradation, the ruined health and blighted lives which have resulted from this wholesale turning the rich products of the soil into what in too many cases has proved liquid damnation. Properly utilized, alcohol has its uses, which can be replaced by nothing else, but its proper use does not consist in its daily employment as a drink.

AN interesting instance of fighting insanity by insanity, the *Scientific American* says, has recently been noticed among the Blackwell's Island patients. Two lunatics had been received who were disposed to commit suicide. In addition each possessed a special delusion, one to the effect that he was a cow, the other that his head was an iron ball, and was to be rolled along the floor. The two patients were placed together, and each was privately informed of the other's weakness, and warned to watch his companion to prevent him from taking his own life. Thus each had a charge in the other. Their vigilance was unceasing. Each supposed himself perfectly sane, and this belief was accompanied by considerable scorn for the other's weakness of intellect and accompanying delusions. Gradually under the influence of this treatment the patients were observed to improve. To have their attention centered on definite duty and on objects external to themselves proved a tonic for their diseased minds, and gradually a complete cure was effected, and they received their discharge from the asylum.

THE manner in which the presence of micro-organisms in air should be regarded has been recently most concisely described by Prof. Burdon Sanderson in the following words:

Considering that we know the living dust of the air *does* contain organisms which are capable of producing putrefaction and inflammation in wounds—for that is a thing about which we are certain—and that it *may* contain the distinctive or specific poisons of particular diseases; therefore, just as when rabies is prevalent among dogs all dogs should be taken care of, or as in countries where there are poisonous snakes, care is taken to keep all snakes out of houses, so it behooves every one to be as careful as possible to maintain the air as free as possible from these minute organisms, not because they are all dangerous, but because we do not know where the danger lurks. And hence the importance of acquiring a complete scientific knowledge of everything relating to their natural history, for it is only by the possession of this scientific knowledge that we can hope to become masters of the conditions which influence the development and growth, the origin and existence in the air and water and other media, of these more dangerous organisms on which disease is directly dependent.

THE Cremation Society at Zurich, Switzerland, one of the best organized associations in the world, has adopted the Bourry system, which is described as follows: Like Siemens, M. Bourry allows only heated air to communicate with the body. In both systems the corpse burns directly; no flame is to be seen singeing the body, but it burns itself by the abundance of hot oxygen which surrounds it. Bourry uses carbonic acid gas, prepared in a coke regenerator, for heating the crematorium. During the process of cremation he uses mainly chimney gases for heating the air before it touches the corpse, which allows a more economical use of the heat. It is of great advantage that the chimney should be thirty-five feet high from the base of the cellar, so that it is fully covered up by the building. The ashes fall, without being touched, by an almost automatically working apparatus, into the urn. The dissolution of the body does not take place in the dark, unseen and uncontrolled, but the whole action is clear and open. Bourry and Venini place the crematorium, which has the shape of a sarcophagus, and which can be approached from all sides, in the midst of the hall in which the service is to take place. There is a little window on the back of the sarcophagus, through which one can see the process of cremation, which is completed within one to one and one-half hours, without smell or smoke. The process is solemn and beautiful, and avoids every unesthetic manipulation.

XUM

Sloan Maternity Hospital and Vanderbilt Clinic.—It will be remembered that Mr. Vanderbilt, previous to his death, made a donation to the medical department of Columbia College, known as the College of Physicians and Surgeons, of half a million of dollars. Elegant buildings for the college have been erected on a large plot of ground on Fifty-ninth street and Tenth avenue, near the Roosevelt Hospital. On the 29th of December a maternity hospital and a building for clinics, located on the ground adjoining the college, and for clinical purposes really forming a part of it, were dedicated to their great work with appropriate services. The maternity hospital, which is as complete in all its details as science, good taste and an unlimited supply of money can make it, was erected by Mr. W. D. Sloane, the millionaire carpet merchant, and its thirty-six beds endowed by his wife, a daughter of Mr. Vanderbilt. The Vanderbilt clinic is the memorial of the four sons of Mr. Vanderbilt to the memory of their father, who so liberally contributed to the College of Physicians and Surgeons. The many princely donations made to hospitals and scientific organizations in this city during the past few years, and the special attention given to every department of science, makes of New York a scientific center unsurpassed by any city in the world. It is hoped that the good work in the cause of science and humanity may stimulate other contributions in the same direction.

BIBLIOGRAPHICAL.

A COMPLETE HANDBOOK OF TREATMENT Arranged as an Alphabetical Index of Diseases to Facilitate Reference, and Containing Nearly One Thousand Formulæ. By Wm. Aitken, M. D., F. R. S. Edited with notes and additions by A. D. Rockwell, A. M., M. D. New York, E. B. Treat, 771 Broadway, 1887.

The large work of Dr. Aitken, the seventh and last edition of which was issued in 1880, was so long a favorite with the medical profession that a condensation devoted to treatment will be naturally received with marked favor. The original handbook, of which this is really a second edition, with a new editor, was published in 1882, six years ago. Since then the medical profession has made vast strides, not only in pathology, but in treatment, nearly all of which seemed to have passed unnoticed by the editor, whose notes and additions are, to say the least, very meagre. We find no mention made of intubation in croup and diphtheria. Tartar emetic is prescribed in pneumonia in what is called small doses (one eighth of a grain), while the experience of the present day shows the drug to be much more effective in from the one-fifteenth to the one-hundredth of a grain. In the frightful paroxysms of anegina pectoris we are advised to give thirty minims of digitalis, repeated in half an hour, while no mention is made of amyl nitrite by inhalation, or nitroglycerine, or morphine subcutaneously, which are now everywhere considered the most effective remedial agents in the frightful paroxysms of pain. In diphtheria the old treatment is given, but no mention is made of papoid in dissolving the membrane, or of alcohol applied freely to the parts. As a mirror of practice ten years ago, from the standpoint of the Old School, the work is excellent, but ten years in the history of our profession is an age.

A MANUAL OF MEDICAL JURISPRUDENCE, WITH SPECIAL REFERENCE TO DISEASES AND INJURIES OF THE NERVOUS SYSTEM. By Allan McLane Hamilton, M. D., with illustrations. New York, E. B. Treat, 771 Broadway, 1887. Price, $2.75.

The fourth volume of the publisher's "Medical Classics" is intended as an elementary treatise for lawyers and doctors, in which the different subjects which come under the head of medical jurisprudence shall be discussed in a practical manner, and with as much minuteness as will give a general idea of the subject. The introductory chapter is devoted to a general consideration of the various forms of insanity. The second chapter is on the legal relations of insanity. The third chapter is upon hysterical states and feigned diseases. Abundance of these cases are brought into court almost every year, in which large damages are claimed against corporations for supposed injuries to the nervous system, which never existed, and in which the peculiar conditions of the system can be traced to hysteria. Epilepsy, alcoholism, suicide, cranial and spinal injuries are discussed in their connection with crime. As a book of reference to the lawyer and the physician the work will take the place on the office table for frequent consultation of more extended treatises on the subject.

CORRESPONDENCE.

DR. LINDORME'S REPLY.

To the Editors of THE NEW YORK MEDICAL TIMES:

It is very surprising how often what one writes, is surprising to some one who reads it. And in order to get out of the strangeness involved, it is necessary to weigh carefully all pertinent facts and alleged reasons.

If your correspondent G. L. Freeman will do this, I hope to have yet the pleasure to see him adhere to my standpoint.

As to the fact that great men have invariably gifted mothers, there are instances enough. I never yet found the time to collect, as I intended, the most striking ones, or make, as it were, a nativity statistics of great men. But from my memory I may mention Frederick the Great of Prussia; Turenne, Prince of Condé; Goethe; Schiller; Immanuel Kant; Napoleon I and Arthur Schopenhauer, of which men the last named made extensive researches about the relation, and was, to my knowledge, the first to establish it philosophically, and your correspondent does in no way weaken my position by claiming that very often great women bring forth small men; being poorly matched their general nature is borne down, and lowered to the level of their mean consort. And then there may be so many other unfavorable circumstances. The wife of Bonaparte presented her husband with quite a number of boys, but with only one Napoleon! And the assertion of your correspondent, that "the children of women of genius have never or seldom been remarkable for intellect," is nothing but an assertion, far from being borne out by the two instances he mentions.

A very strange position assumes your correspondent in admitting hereditary descent in case of a talent, and deny-

ing it in case of a genius, and this singularity, it seems to me, is not diminished by calling a genius preternatural. At least if we want to come to an understanding, or keep any way within the bounds of medical science or biological investigation, we have, somehow or other, to discriminate the part which nature plays in the drama of procreation. For even if we were to take it as granted that genius is a preternatural endowment, we are impelled to admit that there is physical implication, nature not being hoodwinked in bringing forth genius, but of a particularly strongly developed kinetic disposition.

Then, again, if your correspondent is any way friendly of an argument, I can wait upon him with some more pertinent scientific material.

Comparative anatomy, in its researches about the graduation of the brain of man and animal, has demonstrated that it is from the back forwards that the brain grows. There is very little difference in the sensorium of man and the higher animals. "The brain of man is constructed on the the same type as that of the monkey." (Ferrier, "Functions of the Brain," p. 326.) But the upper lobes do not fail to exhibit the bodily signs of superior development, and all plus growth, concomitant with higher endowment, is in the frontal region. Accordingly, it is here where we have to look for any divinity between man and man, and if your correspondent will look up the anatomy of Professor Hyrtl, Vienna, Austria, he will find a very interesting digression on that part of phrenology—the only one—which is borne out by scientific anatomy; it is as it were the physical location of the *secunda petri*, and reveals itself to the most superficial observer in the distance apart of the eyebrows, if this is accompanied by the peculiar loftiness of the bony structure in this region, which ever obtains in case the cranial development is somewhat more than phosphate of lime. Exceptional intelligence, of the kind which is so rare, that your correspondent cannot resist the temptation to call it preternatural, and if fashion were not so decidedly against it, would perfer to call it godly; such intelligence is never found without this extra spaciousness in the cranium for the extra convolutions of the brain, and if, by a critic like that of your correspondent, we were pushed in this matter of heredity, we would not have much trouble to apply physical diagnosis, and draw the whole matter upon a basis, which would not in any way admit of the attribute preternatural, let alone the expression supernatural, but be plain upright analysis.

Anatomically this observation was made in our time. But the writers on female beauty, some centuries ago, mentioned the spaciousness between the eyebrows as one of the principal points of female attractiveness; and whoever has a keen sense of beauty, and not only of that of woman but also of man, will readily admit that eyebrows which in a bushy exuberance meet on the root of the nose, are not particularly handsome; the face of a monkey would else in beauty of expression excel that of man. But the feeling of beauty is as it were an unconscious impression, the explanation of which is supplied by the typographical anatomy of the most potent part of the encephalon.

Whether a woman of such fortunate anatomical propensities will bring forth a fool, a talent, or a genius, will depend on a great many circumstances. Since Jupiter was dethroned, the Minerva obstetrics got obsolete too, and consequently, as to childbirth with the women of to-day, the anatomy of the brain is not the only one to take into account, and a woman of the most laudable cerebral anatomy, may, for ought we know (without examination, at least), be a pelvic monster. And then the husband! Directly he cannot transmit a scruple of brains to his offspring. But indirectly by his temper, he can influence the intelligence of his children in the most wonderful as well as most frightful way. And all these circumstances work together, and may serve to bear down, or to raise the result. They have to be in every respect favorable to bring forth the most exceptional fruit of a gifted woman, a genius. But we can easily cite a case which may serve to illustrate the pertinent points, and such a case we can present to your correspondent in the mother of the late President Garfield. He will not deny that Garfield was intellectually a man above the average, and if he looks up the photograph of his mother, he will detect between her eyebrows the precise anatomical relations I have had in view.

Your correspondent imagines to have taken a particularly strong position against me by furnishing what he calls an exception to what I proclaim to be an absolute rule, viz., that a silly woman will never bring forth a genius.

The exception which he puts forward is Boz or Charles Dickens.

I admit that the whole notion of a genius is a somewhat contended one. But there is, I think, that much agreement about it, that we may not honor a man with this highest prædicat of mental endowment, unless, in his deeds or utterances he leaves behind the footprints of an intellectual giant, or one of character. Now then, and Charles Dickens should be entitled to such a standard (?) rank with Shakespeare, Pope, Dryden?! This is a great mistake occasioned by the *benigna interpretatio* from exuberance of taste. There was a time when I liked Dickens, too; we boys had "lots of fun" in reading his stories. But when I tried "Our Mutual Friend," some time ago, I had soon to give it over; it was too insipid a stuff; and I defy anybody to squeeze out of the whole book, big as it is, two sentences, worth, as peculiar intellectual enunciations, to rank with those of the above mentioned great poets, or, as lovely pieces of language, with the beauties in Bryant and Longfellow. Dickens succeeded to build up a speedy reputation, because he was so fortunate to start a new manner. The public had grown overfed with novels about lords and dukes, and were glad to hear something about washerwomen and watermen. Well, and with the talent to spin a yarn, Dickens won the literary day. But that was all, and as soon as his manner wears, your correspondent may rely upon it, the genius of Dickens will not save him from utter oblivion.

A somewhat curious argument, I think, your correspondent tries against me, in mentioning that Dickens never spoke of his mother but in contempt. This, I am inclined to believe, proves neither that his mother was silly, nor that he was a genius. If they did not agree, there were, no doubt, other causes at play, which influenced the judgment of the boy. The intelligence of a woman, with reference to childbearing, wants to be considered in a different light than the kind as used to be exhibited in a boarding school for young ladies. "The philosopher * * * may be concealed in a plebian which a proper education might have disinterred" (Addison.) Your correspondent is so kind as to state that my article, to which he takes exception, displays a "wide range of intelligence." Well, when a boy, I was by my father and my teachers, one of whom was a successful translator of

poetry, considered as altogether insufficiently endowed to enter upon a liberal career, and it took me many years to shake off the impression of their verdict, and snatching from the ancients the *aude sapere*, to timidly entertain the courageous belief that, with persistent study, I yet might perhaps, get as far as some others, in trying to deserve the name of a scholar. And all through my life I found that most people recognize the intelligence of others only inasmuch as it is a little of their own knack. There must be a certain equality or at least relation between the judged and the judging person, a point which, as to superior endowment generally, the French philosopher Helvetius had in view when he said: "Ce n' est que l'esprit qui sente l'esprit."

C. A. F. LINDORME.

DELUSION THE TEST OF INSANITY.

A paper on "The True Nature and Definition of Insanity," in the *Alienist and Neurologist*, for October, 1887, from the pen of its editor, Dr. C. H. Hughes, of St. Louis, Mo., presents the most satisfactory view of this much-debated question which we have yet seen; one which we deem it advisable to present to the readers of the TIMES in a (very) condensed form.

Dr. Hughes holds, with others that "*delusion* is the test of insanity." But, unlike some others, he would not restrict the meaning of delusion to "perverted special intellectual concepts, or to the old-time special sense delusions restricted to the five senses." On the contrary he extends its meaning to "any subjective morbid condition of the nervous system which misleads the mind or conduct." He believes that "in every insane person there must be, and always is apparent, a *subjective morbid change in the organism* (due either to ante-natal or post-natal conditions, but usually to both), in the nature of deranged organic, or special, perception or conception;" and that "organic feelings are as delusive as the perverted special sense perceptions and as justly entitled to recognition, when perverted and delusive in their nature and influence on the mind."

The basis of insanity, therefore, is a delusive feeling and associated morbid impulse or conception; an underlying perverted feeling, special or general, dependent upon morbid organic conditions, and impressing itself on the conduct or mental character of the person affected by it. Delusion, in this broad sense and wide interpretation is the true nature and constitutes the basis of a correct conception and definition of insanity" of which "the essential condition is the *unusual, unnatural and misleading subjective impressions of the insane person, coupled with the resultant changes of conduct or of reasoning, or both.* This is delusion and its consequence on character, and this is insanity."

Delusion, as thus defined, "may originate in the muscular sense, in any tactile sense, in the thermal or general sensory centres of the brain, as well as at the seat of the spinal sinus (so called), or in the more purely intellectual area of the psychical concepts; or it may be only definable in a vague abnormal unconsciousness of the proprieties due to environment, or undefinable and only expressed in conduct, speech or action, a negative delusive state, in which consciousness of the impropriety of act or word, and normal psychical inhibition are momentarily abeyant and obliterated by the act, though they may be present before and after."

Again, "To obtain a just conception of mental aberration we must consider the *whole* organism and the whole individual;" for "the more we study the inter-dependance of mind upon organism and organism upon mind, in relation to mental disease, the more forcibly the maxim of Aristotle that the ψυχη (soul and life principle) resides in the whole, and the whole in every part of the nervous system, impresses itself upon us." It is from this view, that of the relation of mind to organism, "that we must study insanity. In this disease it is *the individual* that is affected, the ego that is morbidly touched through his organism, the self-feeling and consciousness that is altered by disease and *this consciousness and self-feeling are the expression of diverse psychical states, which are the product of a multitude of impressions proceeding from all parts of the organism.* The brain is neither always alone or primarily at fault in mental aberration, but the mentality of the individual and all the conditions, physical and psychical, that enter into mental impression and expression, are often concerned in the phenomena of insanity."

Dr. P. Bryce, of the Alabama Insane Hospital, says (Annual Report, 1886): "I object to the popular term 'Moral Insanity,' because there is in it an implication of disease, whereas, the condition of brain which induces it is the result of hereditary transmission, and not of disease. There may be cases of moral insanity supervening upon disease of the brain, but I have never met with such a case, that is to say, where the moral obliquity has not been conjoined with defective reasoning powers. Moral imbecility is the best name for this condition, since it conveys the correct idea of its etiology." The doctor has had twenty-eight such cases under observation.

Dr. George H. Savage, Medical Superintendent of the Bethlehem Hospital, London, says: "The older I grow and the more cases I see, the less dogmatic do I become, in giving absolute opinions of the incurability of insanity, as seen coming on in young middle life.

I have seen cases discharged recovered and remain well, after being insane and in asylums for over twenty years. I have seen an intellectual second summer arise when perpetual winter was certainly to have been expected.

With such experience, I should myself—if called to give an opinion as to the absolute incurability of a case—only feel justified in giving it, where general paralysis, senile dementia and idiocy, were present, for even epilepsy may pass off in time."

H. R. S.

THE DETERMINATION OF THE AMMONIA IN THE URINE.*

BY CASIMIR WURSTER, PH. D.

The peculiar observation that it sufficed to produce upon the surface of the skin a certain climature of 31° C. (88° F.) and 30 per cent. relative humidity,† in order to induce even in the forenoon a strongly alkaline urine, while the evening urine as well as that of "half sleep" was markedly acid, led me to carry out continuous determinations of the ammonia in the urine in order to become sure that the alkaline reaction of the urine did not result from a formation of carbonate of ammonia in the bladder in consequence of fermentation of the urea.

The process of Schlœsing, in which the urine mixed with

*From the Special Physiological Department of the Physiological Institute at Berlin. Contributed by Dr. W. Y. Cowl.

†Ammonials Bestimmung im Harn. Central blatt fur Physiologie, Dec. 24, 1887, No. 20, Berlin Wien.

†Measured by means of a hair hygrometer of flat form, manufactured according to my designs by W. Lambrecht in Gotthingen.

milk is distilled during a period of three days over sulphuric acid of determined strength was for continuous investigations somewhat too circumstantial, and I have therefore worked out a method which allows of a determination of the ammonia in a urine to be carried out in quarter of an hour.

Urea, as is known, is easily transformed into carbonate of ammonia by boiling in baryta water. This decomposition, however, takes place with the utmost slowness at a temperature of 50° C. (122° F.), so that by means of a vacuum produced by a water-pressure air aspirator a solution of urea can be repeatedly evaporated to dryness together with baryta water, without one's finding ammonia in combination with the sulphuric acid placed in the stream of the issuing vapor.

In evaporating urine with baryta water in vacuo a profuse foaming takes place, which can be somewhat reduced by the presence of a hydrocarbon of high boiling point as Toluol or Paraffinol. I prefer to employ, however, for safety in the distillation, two equally large vessels, of which one shall partly hold back the foam. If one takes 10 cubic centimeters of urine, two extra large test tubes will suffice; for 20 c. centimeters of urine I employ stout ball-flasks, one of which is also provided with 5 or 10 c. centimeters of baryta water or with dry magnesia or lime water, and placed over a warm waterbath of 50° C. so that its bottom just touches the water, while the other flask with which it is in communication by means of a glass tube, is submerged up to its neck, and serves to evaporate the overflowing foam. The second flask possesses a triply bored rubber stopper, in order that at the end of the operation by opening a cock at one inlet air may find entrance to the apparatus. From out the second flask comes the ammonia containing watery vapor into a stout walled, ball-shaped absorption apparatus (the branches of which should be 40 or 50 centimeters long), containing sulphuric acid of determined strength. This absorption apparatus stands in cold water and is in connection with a water-flow aspirator. The whole arrangement is covered with a cloth whilst in operation, in order to lessen the scattering of liquid in case of collapse of one of the flasks through the pressure of the external air.

So soon as the air pump is set going a lively ebullition takes place at a temperature of the water-bath of 50° C. After about two-thirds of the liquid is evaporated, one may be sure that all of the ammonia present has passed over into the sulphuric acid. Air is now admitted to the apparatus before it is taken apart.

Since the ammonia is now combined with sulphuric acid, one can use in the determination of the amount by titration either congo red or methyl orange, since these reagents are only uncertain in indicating the presence of weakly acid solutions after subjection to free ammonia. One will, however, be safer with litmus.

Numerous ammonia determinations, which I have carried out in normal urines, yield results entirely agreeing with the values, which previous authors have found by the method of Schlösing. The figures vary from 0.170 gramm (2.6 gr. Troy) in 1,000 cubic centimeters (35.2 fl. oz.) of urine of a specific gravity of 1,003, after imbibition of beer, to 1.050 gramm of ammonia per liter (35.2 fl. oz.) of urine of 1.020 sp. gr. with strongly acid reaction; the highest amount of 1.100 gramm ammonia, was found in strongly acid urine of 1.027 sp. gr.

Neutral and acid urines contained on an average 0.500 to 0.800 gramm ammonia, while the amount in alkaline urines sank to 0.400 and 0.300 gramm.

The determination of the ammonia is therefore a sure proof that the alkalinity of normal urine does not result from decomposition of urea in the bladder, but depends, as shown by further investigation, upon the carbonates of the fixed alkalies.

A CONTRIBUTION TO IMAGINARY THERAPEUTICS.

To the Editors of THE NEW YORK MEDICAL TIMES:

The articles on "Periodic Crazes of the Medical Profession" and "Imaginary Therapeutics" in your January number are certainly timely contributions to a subject of perennial importance. So long as it is true that certain journals seem to confine their reports of cases to those said to have been cured by the thirtieth and higher potencies, and that intelligent persons can be led to accept the teachings of the mind curers, so long it will be necessary to keep before the profession and the public instances which prove the curative power of the imagination, of rest or of the stopping of hurtful medication, mental worry or other unsuspected cause of disease or its counterfeit. As long as strength of imagination differs so greatly in different persons, and some few, on the other hand, manifest such a susceptibility to certain drugs as to respond to them with physiological effects when given in high potencies, under precautions and checks, without the knowledge of the patient and as a test, so long must it be a difficult matter to decide in any given case to what cause a cure is to be attributed, and so long must we be cautious about claiming too much for, or rejecting too hastily, any plan of treatment. It cannot be denied that there are on record well authenticated cases of cures under treatment by high potencies where the patients had been for years previously under various plans without benefit, and where careful observers were unable to detect anything except the highly potentized drug to which they could attribute the result. But the physician who, from the few undoubted cases of this sort, jumps to the conclusion that the average human body is made with such a high grade of nervous susceptibility as these cures would indicate, and that a beneficent Creator allowed the race to suffer on without medical resource for centuries, till light streamed in through the mind of Hahnemann, will stumble on a very large proportion of "incurable" cases, and find it very difficult to explain many stubborn facts.

Of course no one doubts the wisdom of treating a diseased imagination by imaginary therapeutics. In a case of delirium tremens the patient was visited nightly by devils. He begged the doctor to bring him some "holy water" with which to drive away his tormentors; and "*aqua font.*" proved curative in this case, the dose being administered by allowing the patient to sprinkle the water on the devils. Such cases show us what the curative power of imagination is, but we need reports of cases in which the doctor was, or might have been, deceived, in order that we may learn how justly to weigh similar reports in which it is impossible to point out the deception.

Let me report one or two significant cases, and in reading the first one let it be borne in mind that much stress has been laid upon the argument in favor of the value of high potencies, that their efficiency with infants can be traced neither to deception nor imagination on the part of the patient.

An infant living in a tenement house was very sick. The physician in attendance was so confident that the end was

near that he offered to leave a death certificate with the mother to save her the trouble of sending for it. The mother, however, refused to allow him to do so. As the doctor left, the mother was told that another physician was then in the house, and he was requested to see the doomed child. This physician was at the time a faithful adherent to the doctrines of the single remedy and the high potency. He saw the child and quite agreed with the prognosis of the physician who had left. Still a certain medicine seemed indicated, and, as his pocket supply was exhausted, he directed the mother to send to his office for the dose. This she did, and the powder (apis 30) was sent, with full directions as to its administration. Next day the doctor called again, and was much delighted to find his little patient quite out of danger. As he was congratulating himself upon a new case to report, showing the great value of high potencies, his eye chanced to fall upon the little powder he had sent the day before—the medicine had not been touched, and, so far as he could learn, nothing had been done with a view to the cure of the infant since his visit of the previous day. Whether stopping the medicine of the former physician, or something else, cured the child, certainly that thirtieth potency, which so nearly gained the credit, did not accomplish the result.

Another case was that of a gentleman about thirty years of age, enjoying generally the best of health and engaged in the manufacture of a patent medicine, which, however, was not advertised to be a cure-all, but a specific for one definite ailment. This gentleman bruised his knee quite severely against a piece of furniture—hardly an imaginary disease. He applied arnica lotions and compresses, using a dilution of about ten drops of potentized arnica to the pint of water for the purpose. After some days, as the pain and stiffness of the joint did not improve, he called upon his physician, who ordered rest, an arnica compress made from a one-to-four dilution of arnica tincture, and gave arnica internally upon pills. This treatment, however, did not seem to reach the case; the local evidence of the bruise disappeared, but the joint remained lame, stiff and painful. No evidence of disease could be found anywhere about the body, nor did the patient complain of another symptom. After two or three consultations the patient—who never inquired as to what he was taking—remarked that some years before he had had a somewhat similar experience, and his physician had given him a powder (which he tried to describe) from which he had received marked benefit. The physician inquired very carefully about the powder, and at last said that he felt sure he knew what it was, and that he believed it was exactly what the patient needed. He then gave him a few powders of sac. lac.—probably a thirtieth potency would have done as well and given more occasion for future speculation. Patient and doctor did not have another interview for some weeks, and then the patient stated that he had not taken the powders for several days after receiving them, owing to discouragement about the case, but at last he began with them, noticed improvement after each dose, was entirely cured before the powders were gone, and had so remained.

Undoubtedly the best medicine is always the one that cures. Happy is the doctor who can always adapt his remedy to his patient so as to bring about recovery!

Very respectfully,

HENRY G. HANCHETT.

38 West Ninth street,
New York, Jan. 10, 1888.

SOCIETIES.

GERMAN MEDICAL SOCIETY OF PHILADELPHIA.

At the last meeting of the Society, December 12, 1887, Dr. Lawrence Wolff read a paper on Ptomaines, of which the following is an abstract:

He first referred to the long-known toxic effect of decaying cadavers, but how their toxic effect was attributed to a poison rather than the transmission of a special micro-organism creating a poison in the new soil. He quotes the work of Pasteur and others, and their effects upon medicine. He argues for the specific action of the microbe, from the fact that albuminoids can be preserved indefinitely if protected from them, reasoning that the organized body after death does not bear within itself the means of destruction or decomposition. He states that other basic substances generated during life, such as the vegetable alkaloids, have great similarity with the cadaveric bases developing through the influence of bacteria, dwelling on the definite relations necessary between agency and soil to develop certain products. He considers the action of bacteria a chemical one, in consequence of which the complex molecule is split up into simpler ones. He admits the albuminoids, or, rather, parts thereof, as the necessary pabulum of the microbe, but denies the excretory character of the ptomaine, which he holds to be simply by-products of the decomposition. He quotes at length the history and developement of our knowledge of the ptomaines, accords to Dupre and Bence Jones the priority of the discovery in the animal chinoidin. Sonnenschein and Sulzer next produced ptomaines resembling atropine and hyoscyamine, while Rorcsh and Fassender next separated a base giving some digitalin reactions. Schwanert also isolated aptomaine. He then reaches the labors of Francesco Selmi and his work in various poison cases. Liebermann next furnished a coniine-like ptomaine, as did Brouardel and Boutmy, who claimed for the ptomaines the general reaction of reducing potassium ferricyanide, which was soon proven fallacious. After again referring to the vast labors of Selmi, he proceeds to the consideration of pathological ptomaines. He claims by analogy that as the action of alkaloids is proportionate to their chemical structure, so ptomaines must be, and as special micro-organisms produce specific bases, he argues that the type and course of infectious diseases could in this way be explained. Thus he says pathology has fallen an heirloom to the chemist, as predicted by the late Austin Flint. He lays stress on the physiological experiments with ptomaines, and contends once the specific poisons of disease known, the antidote will arise from their physiological action. He refers to Nencki as the first who furnished pure ptomaines, and then to the exhaustive labors of Brieger, the poisonous action of peptones shown by him, and the consideration of the conditions favoring the development of ptomaines. Thus from lecithine Brieger claims choline, neurine and neuridine formed. He shows the development of a number of diamines, called respectively cadaverine, putrescine and saprine, while mydaeline he found the most poisonous, and having mydriatic properties. Brieger shows these to belong to the ethylone series, and not to the pyridines, and not responding to the reduction test. Villiers separated the cholera ptomaine from the intestines, of a trimethylamine odor, acting on the nervous system and heart of animals. He also isolated a pneumonia

ptomaine, which he holds identical with that of diphtheria. The writer then quotes the labors of Gautier, who isolated parvoline and hydrocollidine and others, as well as leukomaines, from living tissues, and claims the classification of ptomaines with alkaloides, but thinks ptomaines destroyed in the body by oxydation, as not found in the urine. Brieger, in his latest researches, describes as ptomaine a poisonous amido-acid, also midatoxine and methyl-guanidine. This investigator also experimented with pathogenetic bacteria in cultures, and claims that while the staphylococcus pyogenes aureus produces only ammonium chloride the streptococcus produces, besides this, trimethylamine. From cultures of the typhus bacillus he obtained thyphotoxine; from tetanous ferment another giving the same physiological symptoms as the cultures. The author of the paper then quotes the tyrotoxicon of Vaughan, and lays stress on its importance both as a forensic ptomaine, as well as one pathogonomic of cholera infantum. He then gives a resumé of his paper, dwelling on the generally transient character of the ptomaines and their instability. He speaks of the difficulty and complexity of their chemistry, and calls attention to the danger of new productions in the process of isolation, but principally of the danger, in his opinion, of reducing their complex molecules into simpler ones during their purification. He disclaims the relative value of their development from cultures, and says their absence from the urine where alkaloids are found is no proof of their nonexistance or oxidation, His principal point is in calling attention to the volatility of ptomaines in their basic state, and the probability of their excretion by the respiratory apparatus, which is clinically borne out by the specific odor of diseases, and physiologically by the well-known poisonous exhalations of amoniacal compounds. He claims that the true pathological ptomaines will be found in the pulmonary exhalations, and states that he is engaged on experiments with a view to test his theory.

DISCUSSION.

DR. WEED related a case of sausage poisoning, in which the well-known symptoms of gastro-intestinal irritation quickly followed the ingestion of the food, but disappeared on the second day. On the ninth day an attack simulating cerebro-spinal fever appeared, with headache, vomiting, retraction of the neck, delirium, spastic contractions on irritation of all the voluntary muscles, acetonuria, and death by failure of respiration. The post-mortem revealed only hyperæmia of the cerebro-spinal meninges. Now, in considering this case, the primary gastro-intestinal phenomena are readily understood to be those of local irritation. But those appearing after nine days, do they speak for a late intoxication, or for an infection after a period of incubation? Is there any known ptomaine which, introduced into the gastro-intestinal canal, would be so gradually absorbed and so slowly eliminated as to exhibit accumulative action at the end of so long a period?

DR. FORMAD called attention to the fact that cadaveric poisons are volatile, so that the danger from dissecting wounds diminishes from day to day after death. Virchow and von Recklinghausen advise waiting until the third or fourth day with the autopsy in all cases of infectious disease. And even healthy tissue, as in sudden death from accident, or taken from the living animal, is highly poisonous if introduced under the skin. So, too, is the saliva, of which the serpent virus is but a specialization.

Another reason for delay is the fact that the less dangerous bacteria of putrefaction will ultimately crowd out the specific bacteria of the disease. He confirms Dr. Wolff's statement that oxygen is necessary for the development of the bacteria, his investigations made in conjunction with Prof. Vaughan upon the bacteria of diphtheria in milk having illustrated this fact. In his opinion bacteriology has as yet offered nothing absolute in the diagnosis of disease, except in the cases of anthrax, tuberculosis and relapsing fever; and he hopes that chemistry will in the near future give us the pathognomonic principles of disease.

DR. MAYS said it is not true that all animal poisons are the products of the development of micro-organisms, and cited as instances the toxic effect of saliva, its analogue, the serpent venom, and even the physiological peptones, when introduced under the skin. So, too, Papaitine of vegetable origin, in which no bacteriological agency is claimed, is identical in its effect with the rattlesnake poison. Could not, therefore, certain cases of ptomaiæmia be due simply to the presence of physiological materials in the wrong place—as, for example, the hydrated albuminoids in the circulation? The poison in Weed's case was probably the "Wurst-Gift" of Brieger, analogous in its effects to curare.

DR. WISE called attention to the fact that certain savage nations live almost exclusively on the meat of animals which died of a natural death, and whose meat is partially decayed—such as the nomadic Arabs and the Norwegian fishermen—without experiencing any ill effects.

DR. MILLER emphasized the element of susceptibility in the production of the phenomena of ptomain poisoning, and cited cases, one of tyrotoxicon and one of post-mortem poison, in which only certain individuals experienced ill effects.

DR. ROSENTHAL called attention to the fact that in the cases of ergotized rye and fish-pickle vegetable and animal tissues furnish identical poisons, viz., propylamine and trymethylamine.

DR. SEILER, in reply to Dr. Wise, said that immunity results from the habitual introduction of toxic elements into the system, as in the case of the poison of insects. He questioned whether the endemic leprosy among the Norwegian fishermen might not be in part due to the very habit cited.

DR. MUEHLECK denied the toxicity of saliva per se, quoting the authority of Frerichs, whose experiments showed his own saliva to have been at times toxic and at others not, and attributed this difference to the demonstrated presence or absence of micro-organism in the respective observations.

DR. COLLINS expressed his belief that ptomaines are constantly produced in the body, and that auto-infection is prevented by the simultaneous production of antagonistic ones.

DR. WOLFF, in closing the discussion, said that in Dr. Weed's case the primary phenomena were due to direct irritation, while the later symptoms were of bacterial origin. There is a remarkable resemblance between ptomaiæmia and curare-poisoning. As we are ignorant of the mode of preparing this drug, who knows but what decayed animal tissue may be one of its ingredients? In reply to Dr. Wise's remarks, he called attention to the fact that cooking decayed meat would drive off the volatile ptomaines and kill the bacteria, and that when such food is taken raw the process of digestion effects the same result.

OBITUARY.

Dr. Adolph Lippe died in Philadelphia January 23d, aged 76 years. Dr. Lippe was a member of the celebrated Zur Lippe family in Germany and the oldest son of Count Ludwig and the Countess Agusta Zur Lippe. Dr. Lippe was an earnest and consistent Hahnemannian, an able and pungent writer, strong in his friendships and unsparing in his denunciation of what he believed to be fraud and hypocrisy. He emigrated to this country in 1839 and graduated at the Allentown College in 1841, receiving his diploma from the president, Dr. Constantine Hering. From 1863 to 1868 he was professor of materia medica in the Homœopathic College of Pennsylvania. His clinical reports and his translations from the German, French and Italian of valuable essays and treatises, brought him prominently before the medical public. His belief in homœopathy was so earnest and so entire that he found no language too strong and no criticism too sharp for those who used what to him was a sacred name to cover what he called a "mongrel practice." Almost the last of the so-called high dilutionist he was found when the summons of death came with his banner flying and his lance in rest dealing sturdy blows for what he believed to be truth. No one, not even his enemies, of whom he had many, will question the honesty of his convictions or the courage and energy with which he defended them.

Dr. Wesley M. Carpenter, an important member of the *Medical Record* staff, died in this city January 7th, aged forty-nine years. Dr. Carpenter, at the time of his death, was Clinical Professor of Medicine in the New York University, the editor in chief of the *Epitome of American Surgery and Medicine* and the editor of "Wood's Handbook of Medicine." He was present as reporter at nearly all important medical meetings, and his report of the proceedings, for the *Medical Record*, of the International Medical Congress was so accurate and complete that it was copied, in part, into nearly all the medical journals of the country. Dr. Carpenter filled a place in the profession as a gleaner and condenser of facts, which made the whole profession his debtor.

TRANSLATIONS, GLEANINGS, ETC.

DISEASES OF THE NOSE AND THROAT.

BY T. M. S.

Diphtheria.—The ozonized distillation of jequirity, the strong ozonized aqueous extract, added to a little water, and used as a mouth wash or gargle, causes an exfoliation of diphtheritic patches, as fast as they form; the same results are obtained by inhalation. It also annihilates the hybrid germs of syphilis and cancer, on the tongue, tonsils or cheeks.—*Amer. Med. Jour.*

New Method of Rhinoplasty for Saddle Nose (J. Israel, Berlin. "Annals of Surgery").—Konig's method for this purpose is dangerous. It disfigures the forehead by the removal of two flaps and leaves an unæsthetical lump, instead of the normal depression between the forehead and nose. Israel takes but one 7 mm. wide, quadrangular skin-periosteum-bone flap from the forehead. This he turns down with its bony surface out, to form the bridge of the nose. The soft part of the nose is severed from the bone transversely and turned forwards; to this the free end of the above flap is sewed. The frontal wound is stitched up. The bone surface of the flap is allowed to granulate and cicatrize, this draws the skin from the posterior surface around until it covers two-thirds of the flap's circumference. The sides of the nose are now formed from the old depressed bridge. This is divided down the middle—the superimposed flap being held aside—and prepared back, after cutting across, above and below. This gives a quadrangular flap on each side. The skin piece from the forehead is freed along its edges, so that the raw surface comes against that of the external flap, and its skin surface is left facing inwards. In this way the narrow margin of skin that has been drawn to the front surface of this flap is left there, and with the two flaps from the original bridge of the nose constitute the covering of the new bridge. He demonstrated two originally bad cases where, for the present at least, very nice results were achieved.

Treatment of Adenoid Vegetations of the Naso-Pharynx (Calmettes, Paris. Idem.).—The writer strongly advocates the complete removal, under an anæsthetic, of these growths at one sitting. He uses a large curved cutting forceps, but has aided their employment by a manœuvre designed to draw forwards the soft palate and thus expose more readily the field of operation. An india rubber tube is passed through the least obstructed nostril and its distal end made to appear in the pharynx. This is then grasped by a forceps and drawn out through the mouth. By traction it is now obvious that the soft palate and uvula can be pressed forward against the hard palate. The index finger is used for exploring the site of the tumors and facilitating their removal, and at the end of the operation it is forcibly introduced into both posterior nares, to maks sure that they are clear. The use of ice and boracic acid powder insufflations for the nose form the after treatment.

Lateral Pharyngetomy for Removal of Tonsillar Tumors (Professor Obalinski, Cracow. Idem.).—One external incision runs along the front border of the sterno-cleido, from the mastoid process to the annular cartilage; the other is from the angle of the jaw, perpendicular to the first. The lower jaw is sawed through 1 ctm. above the angle (between the temporal and masseter muscles), but the joint piece is not removed. The two segments are drawn apart by hooks, and after the removal of the tumor, brought back and doubly wired.

Before closing the wound, in an illustrative case, a tube was inserted reaching to the stomach. This could be removed in ten days. The patient was discharged recovered in five weeks, and with normal acting jaw. This method he recommends in high pharyngeal resection. Gussenbauer's incision is sufficient in the low; whilst for cases where the tumor involves the floor of the mouth, Langenbeck's and Kocher's cut is most suitable.

Epistaxis.—This is general from the septum nares, which is supplied by a branch of the superior coronary, a branch of the facial, which ramifies in the septum nares. It enters the open nose just below the alae nasi, crossing the superior maxillary bone at that point. Pressure at this point will arrest the bleeding.

Chronic Laryngitis (G. Hunter Mackenzie. Retrospect).—The author deprecates delay in treatment by trusting to internal medication, sprays and powders; recourse should be had to pigments, of which the best is nitrate of

silver. Commencing with a solution of 30 grains to the ounce, it should be increased 30 grains every ten to fourteen days until 120 grains are reached, or ever more according to the amount of success achieved. It should be applied with a brush, at first three times a week and subsequently twice a week, for a period extending over several months. A case presented had been under treatment for six months. When first seen, both vocal cords were thickened, red and fleshy, with granulation-looking projections; there was slight inspiratory dyspnœa and whispering aphonia. The dyspnœa disappeared, normal voice returned and only a slight redness of the vocal cords remained. Avoidance of all causes of laryngeal irritation, such as alcohol, tobacco, etc., are strongly insisted on. Chronic laryngitis, even of quite simple form, frequently drifts, through neglect, into a hopeless incurable condition, from the supervention of tuberculous change.

Chronic Laryngitis Due to Nasal Obstruction (Idem.).—This form depends on some degree of nasal stenosis, and is somewhat different from that chronic laryngitis, which is frequently associated with post-nasal catarrh. Here the laryngitis seems to depend, not so much upon obstruction to the nasal respiration, as upon irritation of the pharynx, and larynx by the secretion, and the direct extension of the inflammation from the nose to these parts. A severe form of inflammation commencing in the nose and slowly spreading to the pharynx, larynx, trachea, and even to the bronchi, has been described, under the title of "Blennorhœa of the respiratory mucous membrane." It frequently causes stenosis dangerous to life. The possibility of laryngitis being consecutive to nasal catarrh points to the propriety of making careful examinations of the anterior, but especially of the posterior, nares, in all instances of that complaint.

Foreign Bodies in the Nose (Hunt. Retrospect).—1. In all cases of discharge from the nose, especially if fetid or unilateral, thorough cleansing of the nasal cavities by means of sprays, syringing and forceps, should be the preliminary step. 2. A careful and complete examination of the nasal fossæ by means of speculum and mirror. It is not sufficient merely to raise the tip of the nose and look in. You will see very little by such a method, especially in children. If you have no speculum, make one by bending a common hairpin about an inch from its round end, and use an ear speculum. 3. Having detected the foreign body do not try to remove it by douching through the opposite nostril as there is danger of the fluid entering the middle ear, by the damming back of the current on the obstructed side. This is no merely theoretical objection. 4. Where the foreign body presents a sharp edge, extraction is best managed by the forceps. Since a round body, especially if covered with mucus, will probably slip from the grasp of the forceps, it is best to remove by passing a blunt probe or scoop beneath it and dragging it forwards. Tho above rules apply equally to the removal of foreign bodies recently introduced. The *skillful* use of the forceps and probe is even less painful than the "pinch of snuff" treatment or any other ingenious but disagreeable methods usually recommended. This reached the climax in a recorded case, where an emetic was administered, and the mouth held so as to wash out the foreign body by means of the contents of the stomach. Cocaine is of value in reducing the sensitiveness of the mucous membrane, and in contracting the spongy tissue over the turbinated bones, thus facilitating examination and extraction.

Tracheotomy.—Dr. Braddon (Retrospect) advises placing the neck in the position for the operation, then extend the hand over the neck, and with the thumb and fingers make steady pressure, drawing in the thumb and fingers, with the skin (and loose tissue underneath), with them, towards the median line. Continue this movement until you have the larynx encircled with the fingers, when the large vessels which have *been* wounded, and the vertebral bodies, which it is recorded have *blunted a knife point*, are out of the way, while the windpipe is forward and prominent, with skin tightly stretched over the site of the incision.

Professor Buchanan thinks warm fresh air far preferable after an operation to steam baths from kettles and other appliances. If the secretion tends to become viscid and dry, the amount of moisture from a steam kettle diffused through the surrounding air is of no avail to soften the plug. This can be accomplished by placing over the mouth of the tube a bit of honey comb sponge wrung out of hot water; and for the removal of the pellet, a soft feather dipped in tepid water and used as a mop to brush out the tube. The whistling sound may be looked upon as indicative of extension of the disease from the trachea down into bronchiæ.

Galvanic Current in Atrophic Rhinitis.—Dr. Delavan (Epitome), in favorably commenting on the success attending the treatment, as recommended by Dr. Shurly, advocates the following nasal electrode, in place of the disc and sponge; a piece of copper wire, around which has been loosely wrapped a pledget of absorbent cotton, regulating the size of the pledget to the cavity. This should be saturated in lukewarm water, the nasal cavities being thoroughly cleansed, and introduced until the extremity of the electrode reaches the retro-nasal space. The electrode may be made of two sections, and one of these introduced into each nasal cavity at the same time; they are then joined to the connecting wire of the negative pole, and the current gradually applied. The strength of the current should range, for the average patient, between 4 to 7 milliampères, with sittings of from 5 to 12 minutes, or until the irritation caused by the current has been sufficient to provoke a slight watery discharge. The sensations are not disagreeable if the current is not applied too strong. The positive pole of the constant current is applied to the nape of the neck, and the negative to the nasal mucous membrane.

Tabetic Arthropathy with Paralysis of One Vocal Cord (Krauss. "Annal. de l'oreille, du larynx").—The patient was a man, 45 years of age, in whom the first attack of tabes was manifested by pains in the right knee. This was followed by paroxysms of dyspnœa characterized by inspiratory stenosis, supposed to be due to paralysis of the posterior arytenoid muscles or dilators. The autopsy showed typical grey degeneration of the posterior cord. In the medulla oblongata pigmentation of the nuclei of the vagus did not present any marked change. On section of the vagus it separated into three divisions or bundles, one being intact, but the other two showed degeneration. The superior laryngeal nerve was intact, but the recurrents were degenerated. We have here then, first, a peripheral neuritis. The division of the nerve into three trunks, unequally altered, leads to the question, was the one of greatest change, spinal or pneumogastric. The superior laryngeal coming from the pneumogastric would seem to favor the supposition that the special lesion was

spinal. Lesion of the spine produces laryngeal stenosis. But was it only paralysis of the posterior crico-arytenoids shown here? The transient character belongs to tabetic paralysis. But could not a spasm of the abductors and then the pathological irritation of the spinal lesion, manifest itself by producing stenosis with stridor?

Menthol in Pulmonary and Laryngeal Phthisis (Beehag. *Edin. Med. Jour.*).—A 20 per cent. solution in olive oil is injected locally, two or three injections at each sitting, about 15 minims each. The patient is then instructed to take deep inhalations, whereby the cooling and anæsthetic effect produced is accelerated. The injections are used once or twice daily, for two months, combined with inhalations of 5 drops, or more, if bearable, in a pint of steaming water, frequently during the day add to the beneficial effect. Rosenberg points out that its cumulative effects are anæsthetic. At first the anæsthesia lasts for one to three hours; after the second or third, still longer, so that after a week the effect lasts all day. It has also antiseptic effects. The abnormal secretions soon diminish and the whole surface becomes cleaner and healthier. The ulcers take on healing action. Marked infiltrations and tumefactions yield better to lactic acid. Even here the response to treatment is accelerated by first curetting the infiltration. Much benefit is derived from combining the use of menthol and lactic acid.

Gastrotomy for Removal of Foreign Body from the Œsophagus (Bull. *Jour. Med. Sciences*).—The successful operation was performed for the removal of a peach stone impacted in the œsophagus, thirteen inches from the teeth. A median incision, three inches in length, extending from the level of the ninth costal cartilage, to a point two inches above the umbilicus; an incision one inch and a quarter into the stomach; the insertion of the index finger into the œsophagus until it reached the foreign body passed down from above by a bougie; the passage of a slender bougie through the stomach and out through the mouth; the attachment of a piece of sponge to the lower extremity of this bougie, and the withdrawal of the bougie by the mouth bringing up the foreign body, comprise the steps of this interesting and unique procedure. Invagination of the abdominal walls and of the stomach by pressure with the first permitted access of the extended forefinger into the œsophagus, without introduction of the hand into the cavity of the abdomen.

Listerine.—Dr. I. N. Love, of St. Louis, says: "I have found listerine very valuable in the management of diphtheria as a gargle, but most frequently as a spray (diluted with about four or five parts of water); it cleanses the diseased surfaces and removes the unpleasant odor and taste of the secretions from the throat of the patient. In nasal diphtheria (and pharyngeal as well) by adding it to hot water and applying with a syringe through the nostril (using gentle force only), directing the patient, if he is old enough to understand, to hold the accumulating fluid in the throat for a moment, and then expel it. If it should be accidentally swallowed even in liberal quantities, no harm will result, but benefit will accrue to the sensitive alimentary tract. If the patient should unfortunately be incapable of acting on the instructions given above, a few drops may be applied to the nostrils by means of a medicine dropper and thus allowed to slowly percolate over the inflamed surface of the nasal and pharyngeal mucous membrane.

To secure fluidity and free exit of discharges from the nose, melted vaseline (incorporated with boracic acid) may be applied in the manner above indicated and in conjunction with the listerine.

As an aid in the securement of the personal prophylaxis of scarlet fever, it is my practice to have the patient sponged off daily with diluted listerine. By such procedure the question of contagion is almost eliminated during the desquamation period, and, in consequence of the component parts of listerine, it relieves the itching and irritation of the skin, so frequently present, induces a refreshing after-effect, thus adding to the personal comfort of the patient, a matter of no small importance."

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

Iodoform-Inunction in Meningitis.—Nilsson's successful treatment of a case presenting all the symptoms of tuberculous meningitis by the application of iodoform has already been noticed in this series of articles (MED. TIMES, Jan., 1887), and our number for last September contained a report by Dr. Wm. S. Miner of a similar cure effected in the same way. To these may be added five cases of meningitis, apparently tuberculous, which we find detailed by Mr. R. C. Holt in the *Practitioner* for May, 1887. In each of them an iodoform ointment (1 in 4 of vaseline) was rubbed in, "the instructions being to keep the head constantly soaking in it." Three of the patients recovered completely. The successful cases occurred in infants before the bones of the head had coalesced; but the treatment in all cases was not commenced until the disease was well marked, and the improvement in all cases occurred in less than a week. In all the successful cases the mothers, without any suggestion on the part of the physician, spoke of the appearance of a red spot on the right temple. The results appear to encourage a further trial of the treatment, and as soon as possible after the diagnosis is made.

Hippurate of Calcium.—We have received so many enquiries respecting this remedy that we have asked Mr. H. N. Fraser, of Messrs. Fraser & Co., chemists, 208 Fifth avenue, for information, which he kindly furnishes herewith:

"The process for the manufacture of hippurate of calcium is as follows:

"Add a hot mixture of milk of lime to a hot solution of hippuric acid, keeping the acid in excess.

"Filter and pass a stream of carbonic acid gas through the clear solution.

"Concentrate the solution after filtering again, and set aside to crystallize.

"The salt crystallizes in small, square based prisms, or in scales of a yellowish white color, of an odor suggestive of the origin of the acid and a characteristic taste; they are soluble in about 18 parts of cold water and 6 parts of hot water (boiling).

"The salt is supposed to be split up in the duodenum, and the action is due to the hippuric acid.

"The price as quoted to me is five dollars per ounce; if used in quantities I could make it for about two dollars and a half per ounce, retail."

Syzygium Jambolanum.—Messrs. Hazard, Hazard & Co., who have been foremost in introducing this remedy to the profession, inform us that the bark of the jamboo has been found clinically valueless, the seeds only being of service. The reports confirm expectations, and the drug has been found of service in some cases of diabetes, and should be tried, especially if all other seemingly indicated remedies fail. We never expect to find universal panaceas; we look only for specifics when individualized.

"Morrhuol."—P. Chapoteaut claims that "morrhuol" contains all the active principles of cod-liver oil, of which it represents twenty-five times the weight.

The oil is treated with alcohol at 90°. The alcohol becomes colored, and yields on evaporation an amber brown, bitter, aromatic liquid, partially crystallizing at the ordinary temperature, and containing iodine, bromine and phosphorus in combination.

The oil thus treated becomes inodorous and tasteless, resembling ordinary animal oil, and he claims that the curative action of cod-liver oil depends upon the morrhuol it contains. The preparation appears in capsules of medium size, ready for easy administration. Prof. Germain Sèe and other eminent physicians seem to have tested the preparation thoroughly, and Messrs. Fougera & Co., 30 North William street, this city, upon application, will send literature containing much clinical experience in its use, which seems to be well founded. The writer is using it in a number of cases, and will report the results later. The remedy seems worthy of trial.

Almen's Test for Sugar (*Lancet.*).—Of all tests for sugar in the urine Fehling's is undoubtedly the most satisfactory. Its ready decomposition and consequent need of being used in the recent state are disadvantages. To remedy these Professor Almén of Upsala has improved the old Bismuth test for sugar and has prepared a solution which has the advantage of keeping unchanged for years and being at the same time an extremely delicate test for sugar in urine. It consists of a solution of Bismuth subnitrate, with caustic soda and potassio-sodium tartrate. In testing for sugar, albumen, if present, must be first removed by precipitation by heat and acid and one part of the solution treated with ten of the urine, when if sugar is present the bismuth will be deposited in the metallic state. The test is sufficiently delicate to detect sugar in the proportion of only .05 per cent.

Vitiligo a Symptom of Nervous Disease (*Brit. Med Journal*).—Lebrun has recently called attention to the nervous origin of vitiligo in certain cases. This affection may, according to him, sometimes indicate the existence of a central or peripheral lesion, which would otherwise have passed unobserved; and it is, therefore, an important element both in prognosis and in treatment. The skin always denotes the state of the nervous system. If a patient presenting patches of vitiligo be carefully examined, a lesion of the nervous system, either central or peripheric, depending on the spinal cord or the ganglionic system, will in most cases be detected. It would be desirable to determine whether cutaneous affections of tropho-neurotic origin indicate a predisposition to certain nervous affections which appear periodically.

The Palliative Treatment of Carcinoma Uteri.—Dr. Gaches Sarrante reports a number of cases of uterine cancer, which could not be operated upon, treated with a fair measure of success in the following manner: The genital canal was first very thoroughly disinfected by means of copious injections of sublimate solution, and then all sloughs and loosened pieces of the cancerous tissue were removed, care being taken not to disturb those that were adherent, as it was desired to avoid all hemorrhage. Tampons, soaked in a four-per-cent chloride solution, and then spread over with powdered iodoform, were now applied to the cancerous ulcer or inserted into the cavity if any existed, formed by the loss of substance. This was applied so that the entire diseased surface was brought in contact with the medicated tampon, and was retained in situ by a vaginal tampon, being left undisturbed until the next visit. The results of this method of treatment are summarized as follows: 1. Hemorrhages, even when profuse, are absolutely stilled and prevented from recurring; 2. The ichorous surface of the tumor is cleansed, and presents the clear, red appearance of healthy granulation-tissue; 3. The pain is entirely relieved; 4. The general health of the patient is greatly improved and the discharge loses its fetid odor, so that the women are able to go out and enjoy social companionship without the consciousness of being an offence to their friends. The iodoformized tampons were applied three times a week.

The Danger From Corrosive Sublimate.—That the use of corrosive sublimate as an antiseptic dressing is not without risk, several published cases testify; and Dr. H. Keller, who has just added another case to the list, thinks that this agent should never be used as a disinfectant in cachectic or anæmic individuals, or in those suffering from renal disease.

MISCELLANY.

—The New York Post-Graduate School and Hospital held its annual meeting recently and elected the following officers: President, Dr. D. B. St. John Roosa; vice-president, Dr. William A. Hammond; treasurer, Dr. W. Oliver Moore. George Henry Fox, M. D., was elected a director, and the following corporators were chosen: Charles F. Clark, Dr. H. I. Hanks, Dr. Seneca D. Powell, and Dr. Charles Carroll Lee. The treasurer's report showed the financial condition of the school to be more flourishing than ever before, the number of matriculates having this year increased over eighty-seven per cent. The hospital department has increased its space by the addition of a "woman's ward," and also one for men. The "babies' ward" is as popular as ever, and it is the hope that all of its beds will soon be endowed. One bed has been endowed in perpetuity by the St. James Episcopal Church. The hospital department is entirely distinct from the school and is supported by gifts from patrons. It is the wish of the Board of Directors to purchase the present hospital building. During the year 273 patients have been admitted in the general hospital and 148 in the "babies' ward."

—The sanitary condition of the City Hall has been found to be so bad that all the offices have been temporarily vacated, and the Common Council have ordered the necessary changes to be made to put the building in a proper sanitary condition.

—Dr. Dezewiecki says, in the *Medical Record*, calomel applied in powder on the face in small-pox does not prevent the development of vesicles from the papules, but when developed, applied in powder or mixed with starch in the proportion of twenty or thirty per cent. caused them to dry up and prevented the formation of marks.

—Dr. Lirond says an injection of a ten per cent. solution of chloride of zinc, with or without evacuating the fluid, will in almost every case produce a radical cure of hydrocele.

—The *Lancet* publishes four cases in which the diagnosis of cancer was made by several prominent surgeons and confirmed by microscopic examinations, which were cured under the chian-turpentine treatment.

—The chemistry of food is the coming physician.

—Dr. Waugh says he has had no trouble with erysipelas since he commenced two years ago the use of jaborandi. He gives twenty drops of the fluid extract every two hours until perspiration is produced.

—The recent agitation in reference to the City Insane Asylums has led to a much more efficient service. All the members of the staff now receive compensation varying from $300 to $1200 a year with board.

—According to the report of the State Board of Charities for the past year there are 14,063 insane persons in the institutions of this State, an increase of 524 over last year.

—The Society for Promoting the Welfare of the Insane are trying to put a bill through the Legislature, which provides that no person alleged to be insane shall be committed to any lunatic asylum until a jury has decided the question of sanity. We do not believe the Legislature is insane enough to pass such a bill.

—For sweating of hands *eau de cologne* four ounces, tincture of belladonna half an ounce. Rub the hands two or three times a day.

—Dr. Strong, Chief of Staff of the Ward's Island Hospital, reports 843 patients treated during the month of December. Mortality 2.37 per cent; 3969 patients were under treatment during the past year, with a mortality of 6.7 per cent.

—Scientists say that the savage has a more acute sense of smell than civilized people. When two savages get together how they must suffer.

—Cases of spasmodic asthma are often speedily relieved by teaspoon doses of the syr. of hydriodic acid.

—C. E. Dodsley affirms that the addition of four drops of the oil of sassafras to the ounce of iodoform completely does away with the disagreeable odor. This is certainly important, if true.

—There is a mind cure medical college in Rutland, Vt., which issues diplomas. Its graduates can use the letters M. D. after their names, and say that they mean mind doctor.

—Count Beust, the celebrated Austrian statesman, tells us in his memoirs that he was drunk on the day of his birth. His father, in delight at his arrival, sent the nurse a dozen of hock more than a hundred years old. The nurse thought the wine was for a bath, and used it for that purpose. The babe slept for twenty-four hours, and could eat no solid food for several years. Nevertheless it attained, after a life of hard work, to a good old age, seventy-seven years.

—It is reported from Summertown, S. C., that a colored girl, seventeen years old, who was supposed to have died, was taken for burial to a cemetery. At this point a noise, like the mewing of a cat, was heard proceeding from the coffin; when it was opened, the girl was discovered to be living, and to have just given birth to a living child. At last accounts, the *Cincinnati Enquirer* says, mother and child were doing well!

—Dr. T. Lauder Brunton, in a recent lecture, said that the mistaken belief that horse flesh is unfit for food arose from the circumstance that it was forbidden as food for Christians, inasmuch as the horse was sacred to Odin and eating its flesh was a sign of Paganism.

—It is asserted in the *Medical World*, that, if one desires as speedy action of drugs swallowed, as if given hypodermically, they should be given in hot water. One-half of the dose will suffice if given hot, as it is quickly absorbed from the stomach, and the force of the drug thrown upon the system at once.

—The number of insane in the city asylums of New York, October 1, 1887, was 4,418, as against 4,261 October 1, 1886, of whom 1,903 were men and 2,515 women. The increase since October 1, 1880, when the insane numbered only 3,018, has been 1,400, or nearly 47 per cent, while the increase of the population of the city, in the meantime, upon the basis of a present population of 1,500,000, as is generally accepted, has been a little less than 25 per cent. The accommodations for the insane by the city have not been extended during the time so as properly to meet the requirements of this great increase, and, as it sends few, if any, of this class to the State institutions, its asylum buildings are, consequently, all greatly crowded. In 1885 the city purchased a tract of about 1,000 acres of land on Long Island near Central Islip, some forty miles distant, with the intention of erecting buildings thereon and removing its chronic insane, or a part of them at least, to that locality, but until quite recently no positive action in that direction has been taken.